UNIVERSITY OF LONDON LIBRARY

THIS BOOK
MUST NOT BE REMOVED
FROM THE LIBRARY

University of London

606189

REPORTS

FROM

COMMISSIONERS:

TWENTY-TWO VOLUMES.

—(3.)—

ALKALI ACT; FACTORIES; MINES; PRINT WORKS ACT, &c.

Session

10 *December* 1868 —— 11 *August* 1869.

VOL. XIV.

1868-9.

...TY-TWO VOLUMES:—CONTENTS OF THE

THIRD VOLUME.

...HE Figures *at the* beginning of the line, *correspond with the* N° *at the* ... Report; *and the* Figures *at the* end of the line, *refer to the* MS. Paging ...es *arranged for The House of Commons.*

ALKALI ACT:

...h Annual Report by the Inspector of his Proceedings during ...e Year 1868 - - - - - - - - p. 1

FACTORIES:

...orts of the Inspectors of Factories for the Half-year ending ...0th April 1868 - - - - - - - - 75

...to, for the Half-year ended 31st October 1868 - - 123

...tto, for the Half-year ended 30th April 1869 - - - 465

MINES:

...orts of the Inspectors of Mines for the Year 1868 - - 605

...RKS ACT AND BLEACHING AND DYEING WORKS ACTS:

...ort on the Print Works Act and on the Bleaching and Dyeing

ALKALI ACT, 1863.

FIFTH ANNUAL REPORT

BY

THE INSPECTOR

OF HIS

PROCEEDINGS DURING THE YEAR 1868.

(*Presented to both Houses of Parliament pursuant to Act 26 & 27 Vict. Cap.* 124.)

LONDON:
PRINTED BY GEORGE E. EYRE AND WILLIAM SPOTTISWOODE,
PRINTERS TO THE QUEEN'S MOST EXCELLENT MAJESTY.
FOR HER MAJESTY'S STATIONERY OFFICE.

1869.

CONTENTS.

	Page
General Summary	3
Complaints	6
Examples of works with open roasters	6
,, ,, close ,,	10
Cooling flues	22
Aspirator, new form of	23
Estimation of damages	24
Coal smoke	26
Combined and uncombined acid in rain water	34
Ammonia, salts, &c. in rain water	42
Acids in the air—by washing the air	43
,, by exposed jars containing potash	55
,, by aspiration	57
Solid bodies in the air	47

APPENDIX.

M. Robinet on rain water	61
M. Bobièrre ,,	61
Mr. Fletcher's anemometer and tables	63

PLATES.

Crystals, Figs. 1–6	44, 45, 46
Plan of cooling flues, opposite	22
Anemometer	71

FIFTH ANNUAL REPORT

BY

THE INSPECTOR

OF HIS

PROCEEDINGS DURING THE YEAR 1868.

TO THE LORDS OF THE COMMITTEE OF PRIVY COUNCIL FOR TRADE.

My Lords,

I have the honour to report the following proceedings under the Alkali Act.

On former occasions I gave on the first page a summary of the work of the condensers of muriatic acid, allowing, but without certainty, for the unmeasured escape and leakage. This year it was intended to attempt rather more, and to include under the measured amount at least the leakage from the flues of close furnaces. Finding this extremely irregular, it was considered much better to study and endeavour to suppress it rather than give tables of results which varied from day to day. I therefore determined to consider every one out of order in which there was any escape, whenever the owner did not insist on measurement before improvement. Although I consider the work as advanced, I cannot show a diminution of escape of gas from alkali works generally, but the escape from open furnace works is smaller, and it is now shown that these can be worked very long so that only one-half per cent. goes into the smoke, and close roasters nearly as well, leakage included. This is a point gained.

Last year I gave the escape from condensers as under one per cent., and allowed about two for leakages. If we apply the term leakage to that only which escapes through condensers there need be no allowance made for works with open furnaces; but when close furnaces are used we may very fairly charge the smaller class with from one to two per cent., and occasional great irregularities, and the larger with from two to three per cent., nearly all of this through hot brickwork, and in a way not to be observed without experiment—the condensers, however, (the regular instruments for condensation,) being in perfect order.

Having had more time to look this evil in the face, it was determined to seek a cure. Many plans were tried, and a variety of furnaces were built by those who took an active interest in the matter. The first efficient cure was made by Mr. Wilson, at Prestolee, who has put a Gossage tower on the chimney flue, and supplied it abundantly with water. The smoke is washed, as in

the case of open furnaces. If this lasts as it promises to do, and as it has done for some months, the cure is found. At the same time other modes have been successful. Even the ordinary furnace can be kept right by great care.

I have been more patient with these cases of escape than others because of the difficulty of observation, and because of the still more potent reason that they have been the result to a great extent, of the improved working of the condensers, or, in other words, are actually caused at least in part by inspection.

The condensers have not been allowed such a rapid draught as before, and it is the excess in chimney draught which causes this leakage. Even now in some cases it can be cured simply by diminishing the latter draught, but in many cases this cannot conveniently be done.

This is at present the most important detail to be settled regarding condensation—others may arise in time.

When complaints against chemical works are made by farmers there is often a very vague idea as to the nature of the damage done or the source of the evil. Sometimes alkali works may pass free and the blame be transferred to their neighbours; sometimes, on the other hand, the alkali works are blamed when they are innocent. I considered it needful, therefore, to examine this question very fully, and the result has been a series of so far satisfactory experiments. A great deal is now in our power which was before impossible. By examining rain we may know what gases are most prevalent, and also what substances are floating in the air. When there is no rain the same proportional results may be obtained by washing large volumes of air, and by mechanism it may be done in the absence of every one.

I may give the following as conclusions drawn from the experiments, although the inquiry promises more.

1st. The rain from the sea (Western Islands) contains chiefly common salt which crystallizes clearly.

2d. The rain contains sulphates in larger proportion to the chlorides than is found in sea water. This is true from central Germany to the most northern Hebrides.

3d. The sulphates increase inland before large towns are reached. They seem to be a measure of the products of decomposition, the sulphuretted hydrogen from organic compounds being oxidized in the atmosphere. (In other words, as I found chlorides with proper deductions to be a measure of the sewage, however old in water, so I believe sulphates to be a measure of the sewage in air, unless when coal interferes too much to permit allowance to be made.)

4th. The sulphates rise very high in large towns, because of the amount of sulphur in the coal used as well as decomposition.

5th. As sulphuretted hydrogen and sulphide of ammonium oxidize in the atmosphere, the sulphates may be expected to increase in proportion to the amount of decomposing organic matter containing sulphur, such as albuminoid compounds, called conveniently by a name now less used, protein.

6th. When the sulphuric acid increases more rapidly than the ammonia the rain becomes acid.

7th. When the air has so much acid that two to three grains are found in a gallon of the rain water, or 40 parts in a million, there is no hope for vegetation in a climate such as we have in the northern parts of the country.

8th. The acid is calculated as dry sulphuric, but to some extent the agent may be hydrochloric rendered free by the sulphuric acid decomposing the common salt.

9th. Sulphate of soda increases in the rain as coals are burnt and if the salts are heated, chloride of ammonium comes off and sulphate of soda remains.

10th. Chlorides increase with the burning of coal to a perceptible extent, although not so much as in places where salt is decomposed, whether in alkali or other works.

11th. Free acids are not found with certainty where combustion or manufactures are not the cause.

12th. The chlorides and sulphates may be found neutralized even where there are manufactures.

13th. By attending to these facts it may be found if the plants in any place are hurt by acid, and by which acid. Other acids may probably be found as readily as the two mentioned.

14th. By attending to the amount only of the sulphates and chlorides great injustice may be done. The acidity and the average of the district must be known.

15th. Ammoniacal salts increase in the rain as towns increase. They come partly from coal and partly from albuminoid substances or protein decomposed.

16th. The albuminoid substances may be found in the rain even by the rude experiment of burning the residue, which renders unmistakeable their peculiar odour, but they may also be recognized and estimated by the method used by Wanklyn for potable water.

17th. Experiments in the direction here indicated may enable us to study and express in distinct language the character of a climate, and certainly of the influences of cities on the atmosphere.

Many questions must be answered with more minuteness now than formerly. Although the experiments were made in the first place in order to satisfy inquiries which came necessarily under the Alkali Act, it is believed that their value will be found in other departments, and especially when the health of towns is discussed. Most of the hurtful gases could probably be estimated in the same way with equal accuracy.

I was almost obliged to pay some attention to the composition of coal smoke, although work on that subject does not come directly forward as one of my duties.

Simple as the whole subject at first appears, some new question is constantly arising to keep us active; and as I look on our work rather as an effort to study generally the best modes of inspection, the more various the questions which are answered, the more useful will our labours be when inspection is more widely applied.

The changes affect the long discussed question whether close or open furnaces are best. At first the close were the best undoubtedly, at least so it appeared to me, judging from the condensation point of view. There are many other views—some show

the value on one side, some on the other. Now, however, open furnaces have made such advances, and close furnaces have met with so many difficulties, that the position is certainly reversed. It may, however, happen that after another struggle the result will be in their favour again. The best open at present allow 0·2 per cent. to escape, and the best close nearly as little by leakage, and none by condenser, although these are few; whilst in some cases the amount by leakage has gone considerably above five per cent., and watchfulness is more required.

We have caused many changes to be made on account of these leakages, and it is to be hoped that we shall attain success, by which I mean a specific readily put to work, if this cannot be said to have been already attained. At the same time the application of one mode or another to all such works as require it will probably demand a great deal of attention.

It is desirable that alkali makers who have these furnaces should consider this question. We know that the evil alluded to is removed by a change of draught, but the present mode of burning coal requires in most furnaces a very large amount of unused air, and to supply it great speed is given to the gases from combustion.

I proposed a furnace heated below only, and without the double arch above. This is working very well, so far as avoiding leakage is concerned; the fear that it may not do sufficient work does not seem well founded; but I shall not fully report on it this year.

It has been considered well that Mr. Fletcher should give a good deal of time to perfecting his mode of measuring the speed of air. An improved table is added in the Appendix, with modes of correcting for temperature and pressure.

As I think it needful to look to increased accuracy in examining works, open furnaces must come next in order. The alkali makers on their side ought to look to greater stability in their improvements, which require, in many cases, too frequent renewal.

Complaints.

Whilst on the one hand the question of loss of gas by leakage has occupied our minds so much this year, the number of complaints has not been great, although two at least have been of a serious nature, as the escape of gas was undoubtedly considerable. Again, however, the difficulty so often felt appeared. The gas was certainly not all from parts of the works under the Alkali Act. There can be no doubt that manufacturers respect the Act, and that they are less careful of escapes from portions of the work not under the Act. It is, however, a temptation to allow one gas to go in company with another. There are places which allow an escape of muriatic acid, and are still not under the Act. It is a difficult thing to resist the convenience of sending one gas off along with another.

Examples of Works with Open Roasters.

Instead of tables I give remarks on the works in a district where open roasters are used, and afterwards remarks showing the

struggles to prevent leakage into flues where close roasters are used; and, first Mr. Brereton Todd's notes:—

(*No.* 50.)

Owing to the improvements made last year in these works for cooling the gases from the open roasters before entering the condenser, the condensation has been regular during the year, with an escape of 1·6 per cent.

(*No.* 51 *H.*)

No alterations have been made in the condensing apparatus at these works; the general escape has been about 1·4 per cent.

(*No.* 51 *L.*)

The condensation at these works has been better this year, the escape being reduced from 3·3 to 1·4 per cent.

(*No.* 60.)

Only a trace of HCl in the escape gases has been found during the year, and the condensing apparatus remains in good order.

Carville Chemical Company.

Mr. Glover, in answer to my inquiries about the improvements he is making for regulating the supply of water and cooling the roaster gases at these works, says, "We have lately introduced the use of a water meter to measure the water from the water company's main to our pan condenser, which we read off every twenty-four hours; this will show the quantity of water delivered to the condenser, and to enable us to determine if such quantity has been properly distributed over its surface, we have adapted a Schaeffer and Budenberg's engine counter to the tipping box, which shows any hour the number of times it has tipped, and is also a check on the meter. So far as we have tried the arrangement it is satisfactory.

"We are now preparing to pass the smoke and gases from one of our roasters through an iron pipe 3 feet 3 inches diameter and 60 feet long, with the view of cooling them, and so enabling us to get stronger acid from the condenser; we have hitherto cooled the gases passing to this condenser by a shower of water in an intermediate flue, but the latent heat in the steam so generated is objectionable in this plan, seeing that it must necessarily be given up again during the subsequent condensation in the condenser."

(*No.* 53.)

The two new roaster condensers, with the flue and iron pipe for cooling the gases erected at these works and described last year, were put to work in January, and an improvement made in March by the addition of a wash tower, containing 400 cubic feet of condensing space to each condenser. The gases from the roaster are now carried through the flue and iron pipe to the condenser, up which they pass against the water and out at the top into the wash tower, down which they are carried to the flue leading to the stack.

The gases are reduced in temperature 400° Fahr. between the roaster and condensers, and acid of 19° Twaddle obtained, with only an escape of 0·9 per cent.

Previous to this year only one condenser, containing 2,800 cubic feet of condensing space, was employed to condense the gas from two pans; this answered so long as the men charged the pans alternately every half hour, but no dependence could be put on their doing so regularly. A new condenser has therefore been erected, containing 4,485 cubic feet of condensing space, to condense the gas from one pan, the gas from the other being left as before.

The draught through these condensers has been so well regulated lately that there is now only a trace of escape from them.

(*No.* 70.)

During the year the only remaining small roaster condenser at these works has been heightened, so that it has now double the condensing capacity it had before, which reduces the average escape to about 1·6 per cent.

A condenser has also been erected in connexion with the furnaces employed in the copper process, so that any fumes or gases that may be given off are condensed.

(*No.* 115.)

These are new works, which commenced decomposing salt on the 26th of October last. They consist of one decomposing pan with an open roaster, one pan condenser 60 feet high, containing 2,400 cubic feet of condensing space, with an outlet on the top, and one roaster condenser with two shafts, containing each 1,400 cubic feet. The charge consists of 6 cwt. of salt per hour. The gas from the pan passes through an earthen pipe to the condenser, and is there condensed in the usual way. The gases from the roaster pass through an underground flue 80 feet long, with an area of 12 feet, then up the first shaft of the condenser and down the second to a flue leading to the chimney. I have found the escape of HCl so far only 1·9 per cent., but then the work has not been regularly carried on, and the undergound flue thoroughly heated.

(*No.* 108.)

These works are in the same state as last year, and I have found the condensation nearly as regular, with the exception of an escape during my visit on the 18th June, which was caused by an accident to the pumping engine on which the supply of water for the condensers depended; the works were stopped until the repairs were made.

(*No.* 101.)

No salt has been decomposed at these works for some months.

(*No.* 55.)

The escape from these works has been about 0·6 per cent.; at present they are idle.

Tyne Chemical Company.

The escape from the condenser at these works has been under 1 per cent., but on the 21st of April I found that the gases in the fire-flue contained 1·2 grains HCl per cubic foot. I wrote to Dr. Lunge, who at once ordered the furnace to be put out and repaired.

(*No.* 64.)

The condensation at these works has been good during the year; seldom more than a trace of HCl has been found in the escape gases.

(*No.* 68.)

The condensing apparatus at these works still continue in the same unsatisfactory state as mentioned last year; the escape has varied this year from 1 to 5 per cent.

(*No.* 71.)

The condensation at these works has been as perfect as last year; a regular system of testing the inlet and outlet gases has been adopted by the manager, and a register regularly kept showing the average escape.

(*No.* 93.)

The condensation and apparatus at these works continues in the same state as last year.

(*No.* 67.)

Great improvements have been made in these works during the year, the four small roaster condensers having been replaced by large and efficient ones. There are now eight decomposing pans and roasters employed; each pan has a separate condenser, containing 3,240 cubic feet of condensing space; there is also a condenser and wash tower to each roaster, containing 2,050 cubic feet of condensing space, giving 5,290 cubic feet of condensing space for each charge of 6 cwt. of salt decomposed; average escape 0·9 per cent.

(*No.* 62.)

The extensive additions mentioned last year as having been made to the condensing apparatus at these works have been the means of reducing the escape of HCl to 0·2 per cent.

(*No.* 56.)

A new roaster condenser has been erected at these works in place of one of the small ones, containing half as much more condensing capacity; this has reduced the HCl in the escape gases to 2·2 per cent.; two more roaster condensers are also to be erected in place of the two small ones at present in use.

(*No.* 59.)

Although complaints have been made about these works during the year, I have never been able to detect an escape of more than 2 per cent.; no alteration has taken place for the last two years in them.

(*No.* 107.)

When I gave a description of these works last year, I mentioned that only one pan had then been at work, decomposing 7 cwt. of salt per hour; since which another pan has been employed, decomposing the same quantity, without any great increase of HCl in the escape gases, it being still under 2 per cent.

(*No.* 114.)

The manufacture of alkali was commenced in these works last February; there is one decomposing pan with an open roaster, and a condenser containing 2,100 cubic feet of condensing capacity. The gas from the pan is carried through a 14-inch pipe to the condenser, and the gases from the roaster were carried through an underground flue to the same. On the 3rd March I found they had a heating up chimney close by the side of the roaster, and a large escape of HCl passing up it; also, owing to the great heat of the roaster gases (nearly 700° Fah.) entering the condenser, a great escape from the outlet on the top. I requested the works might be stopped until such alterations were made as would afford proper condensation, which was immediately done; and on my visiting them the week after I found they had built four cooling shafts for the roaster gases, with $4\frac{1}{2}$-inch brickwork, each shaft being 25 feet high, with an area of 9 square feet within, giving a total of 900 cubic feet of cooling space, the top and bottom of the short flues between the shafts, as well as the flue leading from the last shaft to the condenser, being made of iron plates. The heating up chimney had been removed, and the gases turned from the underground flue, and carried through the above cooling apparatus to the condenser, which had the effect of reducing their temperature to 400° Fah., and the escape to 2·2 per cent.

(*No.* 57.)

The condensing apparatus at these works has been in good order during the year, and I have never found an escape of more than 1 per cent.

(*No.* 52.)

No alterations have been made in these works during the year; the average escape has been about 1·5 per cent.

(*No.* 61.)

The condensation at these works has been regular, with only a trace of escape.

(*No.* 54.)

The condensation at these works has been regular and satisfactory.

Here follow notes by Dr. Hobson. The number of measurements have been few this year in this district simply because we thought it better to stop the leakage than to calculate its amount. The condenser work has become steady and reliable, and the escape trifling.

It must be taken for granted that in all cases when the contrary is not mentioned the regular condensation is in good order, certainly as good as last year. The various plans adopted will be found interesting to some, and they show what work is actually doing.

(*No.* 28.)

At this work two pots without flanges and closed furnaces are used. The pots are heated by separate fires, which pass into the same flues as those from the furnaces.

January 21.—I found both the furnaces quite tight, no acid escaping into the flues.

March 17.—Only one furnace at work; a very large quantity of acid in the fire-flue connected with it.

April 29.—A new arch built to the furnace since my last visit. This had made a great improvement, the quantity of acid escaping into the fire-flue being very small.

May 27.—Since my last visit some fire-clay and salt had been put on the furnace arch; this had caused a still further improvement, the quantity of acid escaping being reduced to a trace.

October 13.—The furnace was very leaky indeed; as it had been stopped a few days before, the contraction, which would take place on cooling, may account for this.

(*No.* 30.)

At this work a pot without flange and a closed furnace are used. There are separate fires for the pot and the furnace.

January 29.—The fire-flue from the furnace contained a large quantity of acid, that from the pot a trace only.

February 18.—Since my last visit the furnace arch had been rebuilt, and covered with fire-clay and salt, with the exception of about 4 feet in length, which could not easily be reached. The escape of acid was less than the last time, but still large.

March 30.—Since my last visit the 4 feet of the arch not previously covered with fire-clay and salt had been done, and the fire-draught had also been considerably checked; these two things working together had diminished the escape of acid to a trace.

June 10.—Since my last visit the furnace had been stopped for a week, a small fire only being kept in it. The consequence of this was a large escape of acid into the fire-flue.

July 21.—The furnace had by the heat been brought to its usual state, a trace only of acid escaping into the fire-flue.

August 21.—On this day there was a large escape into the pot fire-flue.

August 27.—Since my last visit some repairs had been made to the brickwork about the pot; this had been effectual in stopping the leakage, a small trace of acid only escaping into the fire-flue.

October 29.—The escape into the furnace fire-flue was much greater than usual; this, I believe, was caused by the breaking of the fire-damper, having caused too much draught.

November 30.—Since my last visit the fire damper had been repaired. The escape of acid into the fire-flue was small, about the usual quantity. On every occasion, with the exception of August 21, I found the escape of acid from the pot into the fire-flue very small, being scarcely more than a trace. The escape from the furnace into the fire-flue has on the whole been satisfactory compared with other works.

(*No.* 32.)

At this work two pots with open furnaces and one with a closed furnace are used. The pot connected with closed furnace has a flange and upright rim exposed all round, and is heated by the furnace fire. The two pots connected with open furnaces have no flanges. The fires from these pots pass into the same flue.

March 5.—The fire-flue from the pots connected with open furnaces contained a large quantity of acid.

March 19.—One of the pots connected with an open furnace, which was supposed to have allowed the escape of acid into the fire-flue, was altered so that the edge could be seen all round. The amount of acid in the flue was, however, not diminished.

March 25.—Since my last visit a new arch had been built to the closed furnace; it was, however, leaking badly. As it has been at work only four days, possibly by heating it may become tighter. Only one pot with open furnace at work. The edge of this pot could be seen all round, but still it was not set exactly as it should be. There was a small quantity of acid in the fire-flue.

June 23.—Since my last visit fire-clay and salt had been twice put on the closed furnace arch, but this was not successful, as there was no apparent diminution in the quantity of acid in the fire-flue. One pot with open furnace, and the edge exposed all round, at work; a very large quantity of acid in the fire-flue.

July 8.—Since my last visit an examination of the pot connected with an open furnace at work on June 23 had been made, and a communication between this and an acid-flue discovered and repaired. The escape from this pot, although much less, was still great.

September 30.—Both the pots connected with open furnaces set so that the edges could be seen all round: the fire-flue contained a trace only of acid, much less than I have found in it before.

December 18.—Since my last experiment on the closed furnace a new arch had been built. The escape of acid into the fire-flue was much less than I have ever found before.

(*No.* 31.)

At this work one pot and open furnace are used. The pot has no flange.

March 10.—The pot fire-flue contained a large quantity of acid.

March 24.—The setting of the pot repaired since my last visit. The fire-flue contained a considerable quantity of acid, though much less than on March 10.

April 25.—Since my last visit the setting of the pot had been again repaired. This time it had been effectual, as the fire-flue contained only a trace of acid.

May 30.—No alteration made since my last visit, but on this day the pot fire-flue was perfectly free from acid.

July 30.—Since my last visit the pot had been reset, and the edge made visible all round. The fire-flue contained a large quantity of acid; as this could scarcely arise from the pot I made inquiries to endeavour to find out the cause. I was informed that previously the heating up flue of the furnace, which passes into the same flue as the pot fire, had been bricked up at the beginning of the week, so that no acid could escape, but that on this day the brickwork was substituted by a damper. Very probably this damper not fitting very closely was the cause of the acid in the flue.

October 22.—Since my last visit a double damper had been put in the heating up flue for the furnace, the space between the dampers being left open. My supposition as to the cause of the presence of so much acid in the pot fire-flue on July 30 was correct, as on this day it did not contain any at all.

November 16.—The pot fire-flue contained a trace of acid. I cannot account for the presence of the acid on this day, as no alteration whatever had been made since October 22, when it was perfectly free.

(*No.* 40.)

At this work two pots without flanges and open furnaces are used.

March 17.—The fire-flue from the pots contained a little acid.

May 8.—The fire-flue from the pots contained a large quantity of acid ; there was no apparent reason for this escape.

June 29.—Since my last visit a small chimney had been erected for the pot fires only. In all subsequent experiments I have found a small quantity of acid escaping, but not so much as on May 8. The chimney being only a small one, probably the draught will be less than when the fires were connected with the large chimney, and therefore the tendency to draw the gas into the flue less.

(*No.* 33.)

During last year a pot without flange and a closed furnace were used. There is a separate fire for the pot.

April 28.—On this day I found the furnace leaking very badly. From its appearance I believe this leakage was principally at the bridge. The pot fire-flue did not contain any acid at all.

May 22.—The escape of acid from the furnace was greater than on my last visit. The pot fire-flue also contained acid.

June 9.—Since my last visit the furnace had been slightly repaired, but without causing any improvement, as the escape of acid was decidedly greater. The pot had also been reset, and on this day a trace only of acid was escaping into the fire-flue.

July 14.—Since my last visit new bridges had been built to the furnace; this caused a considerable improvement, the escape of acid into the fire-flue being much less. The charge in the pot having boiled over, this had established a connexion between the interior of the pot and the fire-flue, and on this day I found a considerable quantity of acid passing along it.

August 18.—On examining the furnace I could see it was in a leaky state, but an experiment made on the gases in the flue showed there was no acid passing away. I found, however, that a very large amount was escaping from the exit of the furnace condenser. On making inquiries I was informed that some alterations had been made in the draughts owing to the erection of some new condensers, and that very probably the draught from the condenser would be greater than that from the furnace fire. This of course would fully explain the absence of any acid in the flue. This being only a temporary arrangement is to be altered immediately. Since my last visit the pot had been reset, and a trace only of acid was escaping into the fire-flue.

October 30.—The furnace was on this day in a very leaky state, a large quantity of acid escaping into the fire-flue. The pot fire-flue contained only a minute trace of acid.

November 23.—Engaged erecting an entirely new furnace.

(*No.* 34.)

At this work a pot with a flange, but not exposed, and a closed furnace, are used. There is a separate fire for the pot.

April 9.—The pot fire-flue contained a little acid, but the escape from the furnace was very great, the fire-flue containing a large quantity of acid.

June 9.—The escape of acid into the pot fire flue was greater than on April 9. Since my last visit the furnace had been repaired, a new bridge and a portion of the arch having been rebuilt, and the whole of the arch covered with fire-clay and salt. This, however, had not diminished the escape of acid into the fire-flue ; but as the furnace had only been

working three days since the fire-clay and salt were applied to the arch, possibly, by further heating, it may become less leaky.

July 14.—The pot fire-flue contained about the same quantity of acid as I found on the last visit. The furnace was more leaky than I have ever found it previously. I can only account for this by supposing that through cooling the furnace arch had cracked, and not had time to become fused again, as the fire had been put out and only re-lighted the day before I made this visit.

(*No.* 35.)

At this work six pots without flanges and closed furnaces are used. There are separate fires for the pots.

March 17.—From the commencement of the year until this date every experiment I made at this work showed a large quantity of acid escaping from the pots and furnaces into the fire-flues. On this day I found one of the furnaces altered into an open one.

April 16.—Since my last visit a pot had been set with the flange exposed all round. No acid was escaping from this into the fire-flue.

June 25.—Since my last visit another furnace altered into an open one, and another pot, with the flange exposed, at work. The alteration from closed to open furnaces had not, I believe, caused much improvement; for although the escape into the fire-flues had entirely ceased, the condensation of the acid was very far from perfect.

(*No.* 39.)

At this work there are three pots with the edges exposed all round, and connected with closed furnaces. There are separate fires for the pots. On all the visits, of which I give some details of the state in which I found the apparatus, there was only one pot and furnace at work.

May 6.—On several visits made before this date I found a large quantity of acid escaping into the chimney. Since my last visit the furnace at work had been repaired, and the escape of acid was slightly diminished.

May 29.—A new furnace at work, but no improvement at all caused, as the escape of acid into the fire-flue was great, apparently from a defective place in the arch.

June 13.—Another new furnace at work; acid was escaping from this into the fire-flue, at the place where the side walls and arch join.

July 6.—Since my last visit some fire-clay and salt had been put on the furnace arch to try and prevent the escape of acid. It was, however, not successful, the flue containing as much as before.

September 3.—On this day there was an experimental furnace at work, made by passing the fire underneath, and taking out the middle arch of an ordinary closed furnace. It worked only a short time, and during that short time very unsatisfactorily.

(*No.* 41.)

January 27.—At this work a pot without flange and a closed furnace are used. The fire from the furnace heats the pot. On this day I found only a small amount of acid in the fire-flue.

February 15.—The escape of acid into the fire-flue was very great. As it was known that the furnace arch required repairing, and the furnace was to be stopped immediately for this purpose, the presence of the large amount of acid may be accounted for.

February 28.—The repairing of the furnace arch had diminished the escape of acid, but it was still great.

March 12.—Since my last visit the arch of the furnace had been covered with fire-clay and salt; this, however, had not effected much improvement, the escape into the fire-flue being about the same as on the last experiment.

April 30.—As the leakage from the furnace was generally found to be at the point where the bridge joins the arch, at my suggestion the experiment had been tried of building the bridge in the form of an arch instead of in its usual shape. The leakage was still great, but on examining the arch it was evident there were several places in it where acid might escape.

May 13.—I examined the pot and furnace separately, and found a very large amount of acid escaping from each of them. The work was immediately stopped and an examination made, when the place of leakage from the pot was found and repaired and a new bridge built to the furnace. These alterations, however, had not done much good, as on my next visit, May 23, the escape was still large.

June 20.—A new arch built to the furnace since my last visit. On closing the fire damper smoke could be seen passing into the furnace at the place where the arch joins the side walls. As two inches of fire-clay and salt had been put on the new arch, and it had only been at work three days, it was expected that it would become tighter.

July 4.—The furnace had been strongly heated since my last visit, in order to fuse the fire-clay and salt, and a little salt thrown on the fire in the hopes that it might volatalise and assist in this fusion. The result of this experiment was, however, unsatisfactory, the amount of acid in the flue being still great.

(*No.* 42.)

At this work a pot without flange and a closed furnace are used. The fire from the furnace heats the pot.

January 2.—On this day I found a very large amount of acid in the fire-flue.

January 16.—I tried the pot and furnace separately, and found the escape was principally from the pot.

January 22.—The place of leakage from the pot was said to have been discovered and repaired, but I found there was still a great quantity of acid in the flue.

January 29.—Since my last visit the pot had been reset and the furnace arch covered with fire-clay and salt; the escape was, however, still large.

February 7.—Since my last visit the furnace had been heated very strongly, so as to fuse the fire-clay and salt; the flue contained only a trace of acid, the operation having apparently made the furnace tight.

February 24.—No alteration since my last visit, and, without any apparent reason for it, the escape of acid into the fire-flue was large.

March 3.—Since my last visit the furnace had been again strongly heated, but the result in this case was not satisfactory, as a large amount of acid was escaping into the fire-flue.

March 18.—A new arch built to the pot, allowing the edge to be seen all round. The escape of acid into the fire-flue was still as bad as before.

March 20.—On this day I tried the pot and furnace separately, to determine from which the escape of acid arose. I found it was almost entirely from the furnace.

April 3.—A new arch built to the furnace. The escape into the fire-flue was very great, but as the furnace had only been at work two days, probably the fire-clay and salt which had been put on the arch had not become fused.

May 1.—Since my last visit some more fire-clay and salt had been put over the arch twice, and the furnace strongly heated after each application. The result was very satisfactory, the escape into the fire-flue being very small.

August 11.—As I have always thought the escape from a furnace proceeded from the arch, the owner of this work very kindly determined to erect a furnace with the fire underneath only. The furnace was built with two fireplaces and four flues; the fires went up each of the outside flues and returned through the two centre ones. On this day the furnace had just commenced working and was not very satisfactory, as it required too long a time to roast the charges.

August 19.—The experimental furnace was working very satisfactorily as far as the amount of work was concerned, roasting 33 cwt. of salt cake in 12 hours, which was as much as it was required to do. There was, however, an escape of acid into the fire-flue.

September 19.—A small trace of acid only escaping into the fire-flue.

September 22.—No alteration since my last visit; the escape of acid into the fire-flue was, however, great. I can only account for this extraordinary difference by supposing that on the 19th the furnace was cooler, and therefore the openings allowing the acid to escape made smaller by the contraction.

December 24.—Between September 22nd and this day I tried the furnace frequently, always finding an escape into the fire-flue. On this day the escape was very great, and on examination a hole was found in the bed. The furnace was at once stopped, and on a thorough examination was found to be very much burnt away; and as the experiment, as far as the escape of acid was concerned, was not satisfactory, the owner of the works decided not to rebuild it. The wear and tear on a furnace built in this way, according to these experiments, it will be seen, is very great, this furnace lasting only five months; but I am inclined to think that by using a different quality of bricks and tiles, and altering the passage of the fire-flues, that it may be made much more durable, and I am also inclined to hope that some modification of a furnace with the fire underneath only, may give the great desideratum —a perfectly tight furnace; at any rate in this case we have only to contend with the leakage from the bed, while in one of the ordinary kind we have, in addition to this, the arch, the bridges, and where the arch joins the side walls, from each of which places I have frequently found large quantities of acid escaping.

(*No.* 43.)

At this work there are three pots and closed furnaces. The pots have flanges and rims, but not exposed, and each pot is heated by the fire of the furnace connected with it.

January 21.—The fire-flue of one of the pots and furnaces, the only one at work, contained a large amount of acid.

February 14.—The fire-flue from one of the pots and furnaces contained a considerable amount of acid, the other two a trace only. The flue that on January 21st contained a large amount had only a trace passing away this day. The furnace only commenced working five days before the former date, and as no alteration was made in the interval

between the two experiments, the only reason to account for the improvement is the fusion of the bricks, &c., caused by the heat.

June 24.—Two pots at work. The setting of one altered so that the rim could be seen all round. Both the fire-flues contained a little acid, but not much.

(*No.* 90.)

March 6.—At this work a pot with a flange and rim and a closed furnace are used. There is a separate fire for the pot and furnace, but the flues join together very near to the pot. In the joint flue I found a considerable amount of acid, which must, I think, escape from the furnace. Fire-clay and salt were put on the arch of the furnace, and great care taken in all the repairs made to it ; but all these precautions were unattended with the desired result, as on every occasion I tried the fire-flue I found a considerable amount of acid in it.

(*No.* 111.)

April 14.—At this work a pot without flange and a closed furnace are used. There is a peculiarity in the method of heating the furnace, the fire passing first underneath and returning over the arch. There is a separate fire for the pot. This day the pot fire-flue contained only a trace of acid, but the fire-flue from the furnace contained a large amount.

April 25.—Since my last visit the supposed cause of leakage from the furnace had been found and repaired. The escape of acid into the fire-flue, although considerably diminished, was still great.

May 30.—The furnace rebuilt. The fire-flue contained a little acid, but not nearly so much as before. The pot fire-flue was perfectly free from acid.

June 18.—The escape of acid from the furnace was greater than on my last visit. The fire-flue from the pot, which I have invariably found perfectly free from acid, or containing a trace only, contained on this day a considerable quantity. The potman admitted that he had allowed two charges to boil over, which, I think, would be quite sufficient to account for the escape of acid into the flue.

A new furnace is now at work with the fire underneath only. It is constructed, I think, in a more durable form than the one at No. 42 ; but as it has not been long at work, and, moreover, experiments are still being made with it, I cannot at present give any particulars respecting it.

(*No.* 47.)

January 10.—At this work a pot with a flange exposed all round and a closed furnace are used ; the pot is heated by the furnace fire. On this day the fire-flue contained a little acid ; as the pot was slightly cracked, the escape might be from this.

March 24.—A new pot at work. With a charge in the furnace and none in the [illegible] the fire-flue contained only a trace of acid.

May 20.—Since my last visit the furnace had been rebuilt. I found a little acid in the fire-flue, the leakage being evidently at the bridge.

June 15.—The gases from the fire-flue on examination I found to contain very little acid ; but on closing the damper of the fire smoke passed into the furnace at the junction of the arch and side walls in such quantities that, under ordinary circumstances, the amount of acid in the flue should have been greater than it was. The fire draught was, however, very weak, and some alterations being made in the condensers,

by which the draught from these had been increased, it is probable that the fire and condenser draughts were nearly balanced.

This experiment, as well as some others where I have obtained similar results, would seem to indicate a way of getting over the leaky furnaces; but unfortunately in this case, and the others also, there was a considerable escape from the condensers. If it could be arranged for the condenser draught to be as powerful as that from the fire, and yet for the condensation to be perfect, we should have overcome the difficulty altogether. I do not see any reason why this should not be done, but as yet I have never seen it.

July 22.—The fire-flue contained a trace of acid only.

The furnace at this work and that at No. 30 have on the whole worked the most regularly, and allowed the least escape of acid of any of the closed furnaces under my inspection.

(*No.* 46.)

February 12.—At this work a pot without flange and an open furnace are used. On this day the fire-flue from the pot contained a considerable amount of acid.

March 14.—A place where the acid from the pot had escaped into the fire-flue had been found and repaired; the flue still contained some acid, although not so much as on the last examination.

April 2 and 8.—On both these days the escape of acid into the fire-flue was considerably greater than on March 14.

April 23.—The setting of the pot altered so that the edge could be seen all round, but there was still a considerable amount of acid in the flue.

May 2.—Since my last visit the setting of the pot had been examined, and one or two places where it was possible the acid might have escaped into the fire-flue repaired. The amount passing away was, however, greater.

May 13.—Since my last visit the setting of the pot again examined, and another place discovered where the acid might escape: this was immediately repaired, but the real cause of the presence of acid in the flue had not been found, as it still contained a considerable amount, quite as much as on the last examination.

May 21.—Since my last visit another examination of the pot had been made, when it was found that it had sunk at one side, thus probably allowing the charges to boil over and make a connexion into the flue.

June 17.—Since my last visit the pot had been reset, but there was still an escape of acid into the fire-flue, though not very great.

Since this date I have visited the work many times, and have on each found there was acid in the flue. Sometimes I have thought this proceeded from drainage into the flue, at others that it was caused by a communication between the acid and fire-flue, or by droppings from the acid on to the fire-flue; but up to the present time I have not been able to account satisfactorily for it: future experiments, I hope, will enable me to discover the cause of the presence of this acid.

(*No.* 45.)

March 3.—At this work two pots with flanges and rims, which are exposed all round, and closed furnaces are used. The pots are heated by the furnace fires. On this day, in the flue into which both furnace fires were passing, I found a large quantity of acid.

April 7.—The flue still contained a large quantity of acid.

May 7.—Only one furnace at work; the flue contained only a small quantity of acid. On making inquiries I found that the draught from the fire was so bad that the furnace would have to be stopped for the flues to be cleaned. Under these circumstances probably the gas draught would be nearly as strong as that from the fire; and in consequence, although the furnace might be leaky, there would not be much acid in the flue.

June 19.—The escape of acid into the fire-flue was again great.

June 30.—The furnace supposed to have been leaky, and allowed the escape of acid into the fire-flue, stopped for a new arch to be built to it. This was not, however, the only cause of escape, as the flue still contained a considerable quantity of acid, although not so much as before.

July 16.—A new furnace at work, which it was thought would not be leaky, great care having been taken in its erection. The result, however, was unsatisfactory, the flue containing a large amount of acid.

September 11.—This day a furnace was at work, built on the same plan as the one tried at No. 42. Similar results were obtained from both the furnaces, and this one also was very soon out of repair. It was unfortunate that some alterations were not made in the plan of erecting this furnace. I suggested a different method of heating it, but for some reason my idea was not carried out.

October 2.—A hole burnt in the bed of the experimental furnace, which was covered with a tile; and with the other furnace also at work I found a very large quantity of acid in the flue.

October 6.—The experimental furnace stopped for repairs.

October 17.—The experimental furnace still stopped for repairs; the fire-flue from the other contained a large quantity of acid.

November 12.—A new furnace at work in the place of the experimental one. Very great care had been taken in building this, and the result was satisfactory, a small quantity of acid only escaping into the fire-flue.

(*No.* 48.)

January 16.—At this work the salt is decomposed in cylinders, and afterwards roasted in a closed furnace. On this day I found a very great escape of acid into the fire-flue of the furnace.

January 25.—The fire-flue was perfectly free from acid. The draught of the fire had been checked since my last visit, so as to equalize the strength of this and the gas draught as much as possible. This was thought to be the cause of the improvement, but on examination I found there was some other reason, as when the draught of the fire was increased there was still no escape. As the furnace had only been at work five days when I tried it on the 16th instant, probably by this time a fusion of the bricks, &c., had taken place, rendering the furnace tight.

March 7.—The furnace fire-flue contained a little acid.

March 26.—The furnace fire-flue contained a much larger quantity of acid than on the last visit. There was no satisfactory reason to account for this escape, as no alteration whatever had been made.

April 22.—Since my last visit the furnace had been repaired, and the arch covered with fire-clay and salt. The effect of this was satisfactory, as the fire-flue contained a small quantity of acid only.

May 1.—Since my last visit more fire-clay and salt had been put on the furnace arch. This produced an exceedingly satisfactory result, the fire-flue being perfectly free from acid.

March 7-19.—The fire-flue on both these days was perfectly free from any trace of acid.

June 16.—Since my last visit the furnace had been stopped for some repairs to be made at the fireplace. I found a considerable quantity of acid in the fire-flue. The cause of this escape was no doubt the cracking of the furnace, produced by the cooling.

July 11-14.—Since my last visit fire-clay and salt had been put on the arch, and the furnace twice strongly heated, in order, if possible, to fuse up the cracks and make it in the same condition that it was before the stoppage. The result, however, was not satisfactory, as on both these days the fire-flue contained a considerable quantity of acid.

August 25.—No alteration whatever made to the furnace since my last visit, but the escape of acid into the fire-flue was very much diminished, a trace only passing away. From this date to the end of the year I have not found much alteration in the amount of acid escaping. On each occasion that I have tried it a small quantity was passing away.

(*No.* 49.)

At this work there are six pots; five of them are connected with closed furnaces, and one with an open one.

March 4.—There are two general flues; the fires from four pots and three closed furnaces pass into one flue, and those from the other two pots and furnaces into the second. On this day there was a great escape of acid into the flue connected with the four pots. A leakage from one of the pots had been discovered, and the pot stopped in consequence; this was, however, not the only cause of the presence of acid in the flue, as the amount was still great, although not so large as before.

April 6.—On this day I tried all the flues separately; that from the pot connected with the open furnace and those from two of the pots and closed furnaces did not contain much acid, but the other two, five pots only being at work, contained a very large quantity.

April 15.—The two pots and furnaces found so leaky on my last visit were stopped for repairs. Two of the others that only contained a small amount on the 6th instant on this day contained a large quantity.

May 21.—A new furnace at work with round ends meeting the arch instead of a straight bridge as usually built; a little acid was escaping from this, but not much.

June 1.—The furnaces had been stopped for some days, and during that time fire-clay and salt put on the arches. The escape from each of them was great, but as they had only been at work three days possibly they may become tighter.

July 31.—On this day I found there was a considerable escape into the fire-flue from the heating up flue for the open furnace, although two dampers were in it. I suggested that the space between the dampers should be left open. This having been done the escape ceased entirely.

September 18.—Various experiments having been tried to diminish, or, if possible, entirely do away with the escape from the furnaces into the fire-flues, and none of them proving effectual, the owner of this work determined to put up a wash tower, through which to pass the smoke and other gases from the furnace fires. This tower is built of firebrick, 24 feet high, 8 feet square, and filled with firebricks, such a space being left between the bricks as to give an area of 9 feet, the size of the original flue, and a large quantity of water always kept running through. The results obtained with this tower were extraordinary; it effected a condensation of about 96 per cent. of the acid leaking from the furnaces,

which would otherwise have passed up the chimney. On every occasion since that I have examined this tower the result has been about the same. There are only four of the six pots and furnaces connected with it, but the proprietor of the works is so much pleased with the results of its working, that, I believe, he intends erecting another for the other two pots. It is found that this tower does not at all impede the draught from the fires, the furnaces roasting just as much salt-cake as before its erection. The escape of acid from this tower continued about the same until the end of the year, being very small, and that from the two furnaces not connected with it was also about the same as I have found it before; but from these it was large.

Dr. Blatherwick writes:—"The testing glasses of Mr. Kane "(which you noticed in your last report) work extremely well, "and afford an excellent check to the workmen. During my last "visit I had two practical demonstrations of their utility. Looking "into the glass case I found the weak acid glass from No. 6 con- "denser standing at 2½° T. Now this, slight as it is, is exceptional "at this work. On consulting the corresponding outlet I found a "*trace* of acid passing away (exceptional also), and the temperature "rather higher than the other pipes. Following up these clues I "at once came upon the cause, a defective furnace.

"Mr. Morgan Mooney has adopted Mr. Kane's apparatus, and "here I had another proof of its usefulness, No. 3 condenser glasses "standing respectively at 20° and 7° T.; then the corresponding "exit pipe showed a vast quantity of escape, and the cause here "proved to be a defective condenser. It was old and threateningly "out of the perpendicular.

"I at once ordered them to cease working it, and Mr. Mooney "has since rebuilt it, and speaks well of its behaviour.

"I subjoin some correspondence I have since had with Mr. "Kane respecting the furnaces, and I may observe that in building "the beds they now invariably use bricks made with a rabbet, to "obviate, as far as possible, leakage."

Mr. Kane writes:—"I have lowered the brickwork on the outer "edge of the pans so as to expose about 1½ inch round the metal. "I have also lowered the brick arches inside the pan about 1½ "inch, so as there also to expose the pan. It will be thus im- "possible for any leakage of gas or salt-cake to pass through the "arch of the decomposing pan and down into the flue without "being at once observed.

"I also got blue Staffordshire firebricks made to the exact sweep "of the pot, so that the arch is made more tight than it could "have been hitherto when the ordinary square bricks were used. "Again, I connected the gas from the decomposing pan in a dif- "ferent way from the old method; for instead of bringing it out "at the side of the arch (about half way between the springing "and the crown of the arch) and there bringing it down over the "side to a level, and then commencing with the earthenware pipes, "I built up the arch side and simply put an earthenware pipe on "a tile which covers the pushing hole (from pot to roaster), and "then commenced the pipe ranges at once.

"But the latter alteration increased the draught through the "condensers so much that we immediately began to burn more "coals, and at the same time the drop glasses rose considerably. "We have by degrees got them all down, No. 6 is only at $1\frac{1}{2}$; "but we will soon have it all right."

Cooling Flues.

In last report, p. 53, a comparison was made of the cooling power of brick and iron flues. Two specimens of brick flues were mentioned—

1st.	The underground flue cooled	7°	Fahr. per 10 feet.
2nd.	The overhead „ „	18°	„
	The cast-iron flue overhead „	30°	„

The advantages of the iron and of the open air coolers are great, if the iron stands well. Mr. Mease still keeps them in action, but he has been obliged to remove from them a very large quantity of material. At first this was taken away every week, but now it is done much less frequently. It was of course interesting to know the character of this deposit, and it was examined.

Analysis of Deposit in Cast-iron Flues at Mease's Works:—

	Up Pipe.	Down Pipe.
Iron peroxide	19·866	26·946
Alumina	3·171	4·614
Lime	·371	·486
Magnesia	·414	·298
Soda	11·311	2·808
Silica	6·049	3·309
Sulphuric acid	53·212	48·077
Chlorine	2·141	2·034

Water loss, &c. in addition.

It must be mentioned that the deposit seems to be connected with an interruption in the draught. There is a perpendicular part of the shaft 65 feet from the furnace; from the bottom of this the first deposit was taken. The temperature was 468° F. The bottom of the returning down shaft is 130 feet from the furnace, and has a temperature of 289° F. From this, called the "down flue," the second specimen was taken.

Only one other example exists of a long flue of this kind; it is at the works of Mr. Lomas, at South Shields. The temperature of the gases leaving the furnace about 700° Fahr., when they reach the condenser they are 280° F. Here the deposit is very small; the flue has never been cleaned out, although in use for 11 months. The depth of the deposit at the furnace end is 5 inches 20 feet from the furnace, and at the condenser end 124 feet

56'

Metal Pipes

Brick Flue 11' 6"

Nº 2 Pan

Roaster

Chamber

Brick Flue

Nº 1 Pan

Roaster

Metal Pipes

Cooling Shaft

Pan Condenser
10' square

Pan Condenser
9'-11"

Roaster Condenser
9'-7"

Roaster Condenser
9'-7"

Flush Tower

Flush Tower

Brick

Flue

Vincent Brooks Day & Son ...

from the furnace, the depth is 4 inches in the middle. The gases pass through 20 feet of brick flue before reaching the iron pipe, which is 104 feet long. It is horizontal. An outline is given.

Mr. Lomas is well pleased with the result, and intends to make another cooler of a similar material when he has occasion for it.

Analysis of Deposit in Cast-iron Flue at Mr. Lomas' Works, numbered in the order of deposit.

	No. 1.	No. 2.	No. 3.
Iron peroxide - - -	6·400	19·483	27·407
Alumina - - -	3·545	3·905	4·689
Lime - - -	2·110	1·383	0·482
Magnesia - - -	0·751	0·708	0·281
Soda - - -	24·093	12·653	6·003
Silica - - -	13·020	3·292	4·166
Sulphuric acid - -	48·695	54·286	26·220
Chlorine - - -	0·092	2·278	20·409

Water, &c., in addition.

Mr. Todd says:—"I reported last year that Mr. Mease had "adopted cast-iron pipes for cooling the HCl and products of "combustion in their passage to the roaster condenser. Owing "to the great success of this plan, as far as the condensation is "concerned, it causes much interest to attach to the following "observations made by Mr. Mease.

"The only other point of interest is the cast metal pipes for "cooling the HCl and products of combustion from the drier to "condenser. They have now been in use about 18 months, and "show no signs of failure. For some months after we began to use "them, the action of the acid was exceedingly rapid at the end next "to the condenser, so much so that we cleared above 1 cwt. of "moist chloride of iron per week from each of the two upright "ranges of pipes, which are about 35 feet high and 2 feet in diameter. There is not more than $\frac{1}{10}$ of that quantity formed now. "It is probable that the acid eats away the purer particles of iron, "and acts more slowly upon the carburet of iron, &c., disintegrated "portions of carbon, silica, &c. might then fill up the interstices and "form a protecting coating, as suggested by Dr. Smith or you; if "so, it would follow that cast metal which contained the most "carbon would last the longest."

Aspirator.

In my first report I gave a drawing of a flexible aspirator which took up little room, and which dispensed with the use of water. In my report on the air of mines, and elsewhere previously. I showed a mode of examining the air by simply filling a bottle, and washing the contained air by shaking it and applying tests, But Mr. Fletcher has taken another step and put both ideas together. He washes the air within the aspirator itself, so that it

serves for a bottle. By this means the measurements of air become very exact. When a bottle is used the first measurement only is correct, but the following are scarcely so, because an uncertain amount of air must pass into it and over the liquid before we can be sure that the bottle is filled. The pipe connected with this aspirator is connected with the flue to be examined, and the aspirator drawn out till it is filled. It is then skaken and filled again until a sufficient amount of air has been washed. The liquid is then poured out and analysed or tested as required. This plan can be adopted for muriatic acid with great convenience. It can even be used for sulphuric acid when the gases are strong, but it cannot be used for very delicate operations on account of the sulphur which comes from the vulcanized caoutchouc.

It may, however, be here stated that Mr. Todd uses the finger pump described in first report constantly, and that he still obtains good results with it.

Estimation of Damages.

The mode of estimating damages is at present in an unsatisfactory state. In my last report I gave the opinions of a gentleman of influence and experience at St. Helens, showing that the question was one of great and pressing importance. In a former report, viz. for 1866, under the head of "Basis for defining a nuisance," the following was said:—"We shall never arrive at the "exact definition of a nuisance, but we may approach nearer to it "constantly. It seems to me that we have a basis to begin with "in the smoke of the coal which we so freely use; we cannot free "ourselves at present from the acid gas which accompanies it, more "or less caused by the combustion of sulphur. This basis will "not suit every class of nuisance." Still it will suit the acid class very well. To continue—"When coal is burnt every pound con-"sumes the oxygen of 150 cubic feet of air; when there is one "per cent. of sulphur in the coal this will be equal to 0·46 grains "in a cubic foot of the smoke, or 0·92 of sulphurous acid, nearly "one grain of sulphurous acid in a cubic foot of smoke." But the air is not supplied to the coal in this stinted way; twice the amount is usually supplied, and, as I shall show, even four times the amount, with frequent cases where still more is sent up.

Burning coal with one per cent. of volatile sulphur:—

			A Cubic foot of Smoke at the ordinary temperature contains Grains of Sulphurous Acid.
Using	150	cubic feet of air to one pound of coal	1
„	300	„ „	0·5
„	600	„ „	0·25

When burning coal with two per cent. of volatile sulphur double the amount is given out.

When 300 cubic feet of air are used, and when there are two per cent. of sulphur in the coal, the amount of sulphurous acid in

the smoke is a little above one gramme in a cubic metre, as that is equal to 35·318 cubic feet.

Some years ago I examined about 70 specimens of coal from South Lancashire, obtaining an average result of 1·1 per cent. of sulphur. This was published in 1859. Mr. Fletcher has lately examined some at St. Helens, with the following results:—

	1·75	per cent. sulphur.
	2·22	,,
	1·5	,,
	0·6	,,
	0·75	,,
	0·7	,,
	2·1	,,
	1·35	,,
The average is	1·37	,,

In Staffordshire I have found specimens containing more sulphur, and probably in other places they are equally bad. Smoke from such coal is injurious to plants. Surely this need not require proof.

It may, however, be said that coal smoke being a necessity, the injury it does ought not to be measured. In a manufacturing community the measurement of injury and apportionment to each would be difficult, and as it would balance itself pretty equally against all, it would give no result worth the trouble. But if persons allow smoke with peculiarly hurtful products in it to escape, they put themselves in another position, and then it seems fair that the injury they do should be measured by comparison with that done by others. Leaving out the question of black smoke, we may suppose that the production of ordinary smoke, although it may be proved to be injurious to vegetation, should be considered, if the fuel is burnt with ordinary precautions and in proper places, as producing so much benefit that the blame may be forgotten. The country cannot afford to limit the productive use of coal. But if there should be more acid in the fumes or smoke than can be accounted for by the analysis of the coal, then the evil rises higher than that which we may consider the unavoidable average. Now it is easy to estimate this amount, and it is easy to put down to everyone in a district the exact share of guilt so far as the acid is concerned. The amount of damages is not a very simple question if we choose to take every point into consideration, but it is very simple if we are satisfied with an approximate estimate which will probably be as near the value as persons generally are able to approach in making valuations. Perhaps we might also bring in the element of distance.

As most of the cases of complaint are caused by acids, the advantage of making this division would be very general if all who were liable to have actions brought against them would agree. There are, however, some who expect to escape by good fortune, and therefore refuse to unite.

It sometimes happens that escapes of gas from alkali works, as well as other places, are found to injure crops, and occasional actions are brought against the works with varying success. Even when an alkali work is, as a rule, well conducted, escapes are noticed occasionally by individuals on the spot, and these in a few minutes are said to injure crops. It is difficult for a farmer to prove that any particular work has caused the mischief, and he may bring many actions without gaining redress; it may also be the case that several works were equally guilty. In such cases the farmers and owners of land are in a difficult position. It is expensive to bring an action against one, and to bring an action against many is not to be thought of. For the farmer, therefore, it is much better so far that united action should take place amongst the manufacturers. Again, the opposition of many becomes, at times, too powerful for one man. It may happen, too, that when the manufacturers were united, they would be apt to be a little less careful than if they were to bear the burden alone, since a little more or less escape would be divided amongst all. On the other hand, they would be more inclined to be observant of and check each other. We might reason in this way, sometimes leaning to one side and sometimes to another, whilst the result would in any case be, that the manufacturers would in some places agree, and in others not. But the mode of estimating the damage done by each is a quite independent matter, and it might fairly be adopted either by voluntary or authoritative arbitration.

When the damage is not done by acids a less simple mode of estimation is necessary, and, perhaps, we are not sufficiently advanced to go into such particulars. The other modes of examining the air by washing are by degrees becoming more and more worthy of reliance, and we shall probably soon be able to make full use of them, as we are now able to make use of the acid determinations.

Coal Smoke.

Circumstances led me to examine the condition of the common smoke. It may be said not to lie in my province, but the escape of muriatic acid into it occasionally was the cause of my attention. It was also interesting to know if by analyzing the escaping gases or smoke the actual amount of air passing up could be found. It will, I think, be useful to many if I give an account of the results in full, and first I shall speak of the ordinary coal smoke only. The experiments were made at the sugar refinery of Messrs. Fryer, Benson, and Forster, who afforded every facility, and allowed me to make the blackest smoke occasionally for a few minutes; the same permission being given by the city authorities.

The height of the chimney is 200 feet. The earlier specimens of smoke were taken from the lower part, the later from a height of about 30 feet, where a hole was pierced. The speed of flow was 12 feet per second; the diameter of the chimney at this part was 10 feet internally; the amount of coal burnt was 35 tons per

day. There were six boilers, and many other fires. When taken from the lower part the following results were obtained in 1867 :—

Carbonic Acid.	Carbonic Oxide.	Oxygen.	Nitrogen.
6·03	—	13·89	80·08
6·46	—	11·23	82·31
6·09	—	12·14	81·77
7·93	—	11·00	81·07
5·69	—	14·04	80·27
7·00	0·72	12·34	79·94
8·52	4·41	9·31	77·76
4·42	—	18·20	77·38

These amounts were viewed as representing the smoke from the boiler ranges, and they have been published in a former report. It was found, however, that as various flues entered the chimney the gases had not become properly mixed, and the speed could not be ascertained. If carbon alone were burnt the amount of oxygen and carbonic acid would amount to 21, or within a small fraction of it; but as hydrogen is burnt also there is an equivalent of oxygen removed, and the two gases form the watery vapour which is found in coal smoke, independently of that which is obtained from the air which supplies the fire.

In November 1868 other specimens were taken, with results considerably different. It would seem that much more air was then passing the chimney. Before taking these specimens of black smoke coals were thrown on rapidly, and the doors shut, so as to consume as little of the smoke as possible.

The amounts on November 21st, 1868, were as follows:—

Black Smoke.

Sugar Works, Large Chimney.—From the Lower Opening, November 21st, 1868.

——	1.	2.	3.	4.
Carbonic Acid, CO_2	7·67	7·47	7·31	7·13
Carbonic Oxide, CO	0	0	0	0·52
Oxygen, O	12·61	8·11	10·59	12·93
Olefiant Gas, &c. C_nH_{2n}	0	0	0	0
Nitrogen, N	79·72	84·42	82·10	79·42
	100·00	100·00	100·00	100·00

Here only one of the four specimens contained carbonic oxide. The blackest smoke was not formed on the first trial. The specimens were taken in Bunsen's tubes; the tubes were narrow at the extremities where they were connected, and there was a great difficulty in drawing out the gas. A cubic foot was passed through in order to clear the tubes. This was done by connecting a caoutchouc aspirator with the external one and drawing the aspirator open; a process which required considerable strength, both on account of the small size of entrance to the tubes, the pressure of the atmosphere, and the chimney current.

Another specimen was taken on the 5th of November.

Black Smoke.

SUGAR WORKS, Large Chimney.—Samples taken at the Bottom of Chimney, November 5th, 1868.

——	1.	2.	3.
CO_2	7·25	7·09	7·07
CO	3·80	4·46	6·00
O*	7·41	7·57	7·92
$C_n H_{2n}$	0	0	0
N	81·54	80·88	79·01
	100·00	100·00	100·00

* O found by absorption with pyrogallic acid in this instance.

Here we have carbonic oxide in every specimen, and in one of them a compound of hydrogen.

Another specimen was taken on November 26th.

This time the opening to the chimney was made about 30 feet above the ground, so as to obtain a better mixture of gases.

Black Smoke.

SUGAR WORKS, Large Chimney.—Samples taken from the opening 30 feet above the ground, November 26th, 1868.

——	1.	2.	3.	4.
CO_2	6·17	6·75	5·62	6·08
CO	1·55	0·48	0·02	0·57
O	12·22	12·36	13·24	12·24
Hydrogen H	0	0	0	0
Marsh gas, $C H_4$	0	0	0·77	0
$C_n H_{2n}$	0·13	0	0	0
N	79·93	80·41	80·35	81·24
	100·00	100·00	100·00	100·00

In every one of these carbonic oxide is found, and in two a carburetted hydrogen also.

A specimen was taken on December 2nd.

Black Smoke.

SUGAR WORKS, Large Chimney.—Samples taken 30 feet above the ground, December 2nd, 1868.

——	1.	2.	3.	4.
CO_2	6·64	6·32	6·38	6·00
CO	0·40	0·98	0·20	0·34
O*	11·17	11·86	12·17	12·24
H	0	0	0·46	0
$C H_4$	0·02	0·78	0·52	0·54
$C_n H_{2n}$	0	0	0	0
N	81·77	80·06	80·27	80·88
	100·00	100·00	100·00	100·00

* O found by absorption with pyrogallic acid.

Here, in the blackest specimens, carbonic oxide is found along with a hydrogen compound in all.

It seemed remarkable that so much air should go away unburnt, and thinking that this might be connected with exceptional conditions, specimens were taken from a smaller chimney, which served for very few fires. The results are:—

Black Smoke.

SUGAR WORKS, Small Chimney.

—	Samples collected December 21st, 1868.		Samples collected December 24th, 1868.	
	1.	2.	1.	2.
CO_2	3·51	3·89	2·84	3·77
CO	0·68	0·59	0	0·55
CH_4	0·45	0·41	0	0
O	13·54	14·08	18·46	16·52
N	81·82	81·03	78·70	79·16
	100·00	100·00	100·00	100·00

It was next needful to find again if any carbonic oxide escaped with common moderately brown smoke. None had been found on any previous occasion, and specimens were taken from the upper hole in the large chimney, giving—

Common Brown Smoke.

SUGAR WORKS, Large Chimney.—Opening 30 feet high.

—	Samples collected Dec. 9th, 1868.				Samples collected Dec. 15th, 1868.			
	1	2	3	4	1	2	3	4
CO^2	4·26	4·14	4·25	4·38	5·05	5·06	5·19	5·34
CO	0	0	0	0	0	0	0	0
H	0	0	0	0	0	0	0	0
CH_4	0	0	0	0	0	0	0	0
N	79·11	80·02	80·92	82·11	80·54	80·45	80·18	79·95
O	16·63	15·84	14·83	13·51	14·41	14·59	14·63	14·71
	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00

The smaller chimney was next examined for the same purpose, and it gave, December 21st—

Common Smoke.

SUGAR WORKS, Small Chimney.

—	Collected Dec. 21st, 1868.	
	1.	2.
CO_2	2·53	2·08
CO	0	0
CH_4	0	0
O	18·61	17·7
N	78·86	80·1
	100·00	100·00

It seems perfectly clear that the black smoke contains not only unburnt carbon, but unburnt gases. The actual amount of free carbon is small; the amount of gas is large.

Allowing one half per cent. of carbonic oxide, and as much marsh gas to exist along with seven per cent. of carbonic acid, the amount actually obtained may be calculated thus:—

	Grammes.
7 litres carbonic acid in 100 of black smoke =	13·76648
0·5 „ carbonic oxide „ „	0·62575
0·5 „ marsh gas „ „	0·35779

The heat may be calculated thus:—

	Units of Heat.
3·754494 carbon burning to carbonic acid × 8,080 = - - - -	30,363
0·2681 carbon burning to carbonic oxide × 2,473 = - - - -	663
Total heat produced - -	31,026
The carbonic oxide 0·62575 × 2,403 would give - - - - -	1,503
The 0·35779 marsh gas × 13,063 would give -	4,673
Total heat if the gases were all burnt -	37,202

When the carbonic oxide only is left unburnt, there is a loss of 4·6 per cent. on these amounts. The hydrogen of the coal was not estimated. During the time that the marsh gas and other hydrocarbons escape there is a loss of 19·9 per cent. This, however, can only last for a short time.

Of course the black smoke cannot form after the more volatile parts of the coal are driven off, so that the per-centage is not on the whole coal, most fortunately.

Carbonic oxide exists only in connexion with the black smoke not permitted by Parliament, and it is fortunate that it should be put down, as it is one of the most poisonous of all gases.

Another point comes out clearly. It is not from want of air or oxygen that the black smoke is not burnt, the amount of air is far in excess of that which is required. Now, nearly all patentees have confined themselves to the supply of air, a commodity easily given but not so easily used; the want is in reality heat. The air is present, but it is carried away so rapidly along with the gases that it has no time to combine. It seems to be a matter of time. The reason for this opinion lies in the following experiments published two years ago, but better placed here.

From a common House Fire.

	Carbonic Acid.	Carbonic Oxide.	Oxygen.	Nitrogen.
Gas from chimney 4 feet above the fireplace	0·35	—	19·63	80·02
	1·65	0·38	19·29	78·68
Gas from the middle of a good fire	19·46	0·09	—	80·45
	20·90	0·10	—	79·00
A great mass of coal over the fire, the gas taken from below the glowing mass	17·50	—	2·46	80·04
	17·44	—	0·39	82·17
A heap of glowing coal, gas taken close to the spot where carbonic oxide was burning	15·43	3·49	0·96	80·12
	18·17	2·48	—	79·35
Gas from the clear fire below	16·10	—	4·95	78·95
Gas out of the same fire at the upper part, one inch below the surface	17·21	—	4·25	78·54
	20·80	0·99	—	78·21

Carbonic oxide sometimes escapes even here.

We find that the slow combustion of a common fire allows less air to pass, nearly the whole of the oxygen being taken up. This is quite in agreement with the known desire to increase boiler room, as it is technically termed, in order to increase combustion. The fires are slow, but the gases escaping are better burnt.

This seems in contradiction to the desire expressed to increase the draught of chimneys in order to produce combustion. The wish may be explained by the fact that heat is increased, and combustion may be attained in two methods—one by increased heat for a short time, and the other by moderate heat for a longer time.

There is another mode of explaining the non-combustion of the gases. It may be that the air does not mix with them until it has been tossed about for some time. Indeed, we know for certain that flues may contain muriatic acid on one side and not on the other. In this case the necessity for heat mixture and time is obvious.

It must not be supposed that it is meant that in all cases there is an excess of air when there is black smoke, but black smoke may and does exist with an excess of air. In flues, from puddling furnaces especially, it seems to me that time and air only are wanting, but especially air well mixed, in order to obtain combustion.

I do not intend to propose any plan for smoke burning, although the experiments point clearly in the direction of keeping the gases longer heated, and it seems to me that I could point out instances in which this is successful.

There are several furnaces which burn smoke perfectly, although, taking all respects, I do not know any furnace which has no disadvantage. It is seen that slow combustion with abundance of air produces no carbonic oxide; but carbonic oxide is produced with rapid combustion, even if the air be in excess, we must add, unless heat be continued. But it may also be formed by decomposing the carbonic acid by excess of carbon. The carbonic oxide found in black smoke was not formed by this method, becasue there was oxygen enough present. By the present methods of burning coal under boilers air is abundant in all cases examined,

but heat is not continued so long as to cause combustion in most cases.

Blast furnaces and similar fires are not included here. These furnaces give out carbonic oxide in great abundance, and the oxygen is altogether removed, as the analyses by Bunsen and Playfair show. The gas from these furnaces is taken down and burned with excess of air, in many cases now, thereby removing a most poisonous gas and gaining fuel of great value.

Other constituents of the smoke are water, soot, and sulphurous acid.

BLACK SMOKE.

Water, Soot, and Sulphurous Acid.

100 cubic feet of Black Smoke contained :

Date.	Water.	Soot.	Sulphurous Acid.
	Grains.	Grains.	Grains.
November 18th, 1868 - - -	—	—	33·48
November 20th, 1868 - - -	797·41	—	—
November 21st, 1868 - - -	1047·44	18·52	—

The water depends on the amount of hydrogen in the coal; the sulphurous acid on the amount of sulphur in the coal. The soot contained a tarry substance of a brown colour; it was dissolved out with ether. I suppose that carbolic acid, and other products of the distillation of coal, exists there; indeed it is almost certain, although, perhaps, it would be useful to make some more inquiry into this substance.

We learn from these experiments why people prefer to make black smoke when they want a violent and sudden heat. The amount of carbonic acid in the black smoke is greater than in common smoke, and so more coal is actually burned in a given time, and therefore more heat is given. At the same time the amount of waste is greater, and the gases are more hurtful. This has long been known, although not in this way proved.

It seems to be the desire of all coal burners to obtain a violent draught. Some persons have attempted to make the draught regulate itself by dampers, moved as the heat rises or falls. As we see that gases of the most combustible kind are formed by the coal, it is clear that if the draught is obstructed, the fireplace and flues will fill up with these gases, which will burn with a rapidity rising up to an explosion when fresh air is allowed to enter. I have seen the result of two or three cases in which an explosion from this cause, or from a similar obstruction, had taken place, and have been led to speculate on the effect of one, even a small one, if it happened at a time when the boiler was in a state of considerable tension. It is exceedingly probable that the shock from below would cause an answer from within, which would burst the boiler. Whilst fully believing that too much air is taken up the chimneys, and an enormous loss of heat caused thereby, I am no

less persuaded that there is an excess of gas occasionally in the fireplace, especially at the front, and momentary obstruction may extend it along the flues. A moment is enough when the speed is above 12 feet in a second.

Whenever there is black smoke there is water in the smoke, because the black carbon is deposited from hydrogen compounds, which burn readily. Pure hydrogen uncombined was not found. Sulphuretted hydrogen also seems to be always absent. Sulphur does certainly come from coals in combination with hydrogen, but it is so easily separated that it never reaches the flues. There are several attacks on the hydrogen and sulphur compound, fortunately for us, as otherwise our towns would really be uninhabitable when fires were smoking. Sulphuretted hydrogen is decomposed by heat. When this occurs in the absence of oxygen the solid sulphur is deposited; but, as we see, there is always air enough in the smoke for this event, and so the sulphur burns; this is the chief source, if not the only source, of the sulphurous gases arising from smoke. If any of the sulphuretted hydrogen remained unburnt the sulphurous acid would itself decompose it, forming a deposit of readily combustible sulphur, and increasing the amount of the sulphurous acid. Then the gas itself is readily combustible, and forms sulphurous acid and water by burning. For these reasons that dangerous gas, sulphuretted hydrogen, is not allowed to pass up our chimneys when burning coal.

It may be asked why the vapour of water does not decompose in the presence of carbon, red hot as the carbon is, we suppose, before it issues in a black condition. There is a mode of consuming smoke which consists in simply blowing into the furnace a jet of steam. The effect is instantaneous and remarkable. A clear flame is produced in a few seconds. This circumstance has probably induced many persons to attempt to burn steam; it certainly has the appearance of burning, but these people do not consider that water is already burnt; it is a product of combustion, chemically speaking it is an oxide, and can burn as little as ashes can burn. The cause of the appearance is easily imagined. The water is decomposed by the heated carbon, whilst hydrogen and carbonic oxide, both combustible gases, are formed. These again come in contact with air, and then burn readily and clearly. The consequence is that no carbon appears in the smoke; it is burnt by halves, by two processes instead of one; and the flame extends itself forward, as a little time is required for these operations.

By one method of employing steam there is a large amount of air supplied at the same time. The steam, however, without the excess of air brought by it produces, as it appears to me, good results, but that must be in cases where there is already abundant air and heat.

Still the question arises, why does not the steam formed by the coal prove sufficient? I confess this is not clear to me, and a little more information is required. It is not, however, an absolute mystery, as we can readily imagine an insufficient quantity to be one cause and the want of good mixture another. We do know

that air and smoke may rush together through a flue quite unmixed for some time.

It may now be asked what is the result of this?

It is seen that the manufacturer's interest is not to make black smoke, because it is expensive.

The public are interested in its removal because it adds an unwholesome gas to those already contained in ordinary smoke.

The excessive amount of air used entails an enormous waste of heat.

As to the mode of burning black smoke, the attempts of many have failed, because, although they supplied air, they did not at the same time consider heat, time, and due mixture.

No practical experiments were made by attempting to construct or to alter furnaces, as my object in these experiments was not to burn smoke but simply to understand a subject so frequently coming before my notice, and indirectly, if not directly, connected with alkali works. More may be tried at a future time.

Combined and Uncombined Acids in Rain Water.

As it was desirable to examine the state of the air at a distance from works it was needful to obtain some knowledge of its average condition with relation to muriatic acid, and, next, it was found that so much coal smoke interfered in most places that it was found better to examine for sulphuric acid also, as the product of coal.

For this reason the rain was collected at several spots, especially Manchester and St. Helens. The first is an example of a town where much coal is burnt, the second an example of the same, but with this addition, that there are manufactures of a kind not found in Manchester, and more or less affecting the atmosphere.

It will be seen that sulphuric acid is very considerable in the rain.

Manchester, being large and burning much coal, has a large amount of sulphurous acid in the air, very uniformly diffused. St. Helens has less, leaving out the direct currents from copperworks which have not been examined, but of hydrochloric rather more than Manchester, and, it is believed, less uniformly diffused, whilst it is penetrated by gusts of fresh air more readily reaching it from the country.

It seems certain that chlorides come directly from the sea, or, in other words, that salt is continually floating in the air, so that we must not be too certain that chemical works are doing the evil whenever we find chlorides in rain water. It is only by a careful examination of the quantity that we can judge.

Next, even a large quantity is not sufficient to cause blame; in all circumstances we must learn if it is acid or otherwise, as a large quantity is sometimes transmitted from the sea by violent storms—free acid never, so far as we know. A separate chapter must be devoted to the salts in the atmosphere.

The rain instantly reddens test paper in Manchester, and where most soot is found there is most acidity. It is easy to account for the absence of plants.

As I examined rain in 1851 and in 1857, it may be useful first to give the results here; they will be required for comparison from time to time. The results have been long published, but they have not hitherto been calculated so fully as here. Some years later M. Robinet examined the rain of Paris, and M. Bobierre that of Nantes. Their papers will appear in the supplement.

ACIDITY of RAIN collected in Porcelain Vessels, 1857.

Rain from	Acidity—calculated as Sulphuric Acid.	
	Grains per Gallon.	Grammes per Litre.
Pendleton, N.W. district of Manchester:		
Wind blowing to the town	0·3169	0·00453
Not directly from the town	0·8453	0·01207
Wind touching outskirts of the town	0·8981	0·01283
From town	1·9018	0·02717
From country	—	—
All Saints:		
At All Saints' Church	1·2679	0·01811
„	2·0075	0·02868
For a short time	7·3960	0·10566
Then fell to	2·1132	0·03019
Next to	2·1132	0·03019
And lastly	0·8453	0·01207
Ancoats:		
First sample	2·3245	0·03320
Second „	1·0566	0·01509
Third „	3·0112	0·04302
Average	2·0074	0·02868
Maximum	7·3960	0·10566
Minimum	0·3169	0·00452

RAIN.—Cisterns in Pendleton, Manchester, 1857.

Rain from	Acidity—calculated as Sulphuric Acid.	
	Grains per Gallon.	Grammes per Litre.
Cisterns in Pendleton:		
Number 1	0·3169	0·00453
„ 2	0·2641	0·00377
„ 3	0·3169	0·00453
„ 4	0·5285	0·00755
„ 5	2·0075	0·02868
„ 6	3·3810	0·04830
„ 7	2·4304	0·03472
„ 8	2·1132	0·03019
„ 9	0·6335	0·00905
„ 10	0·7392	0·01056
Average	1·2731	0·01819
Maximum	3·3810	0·04830
Minimum	0·2641	0·00377

Rain.—Lower Broughton, Manchester, 1857.

Rain from	Acidity—calculated as Sulphuric Acid.	
	Grains per Gallon.	Grammes per Litre.
Cisterns in Lower Broughton :		
Number 1	0·4228	0·00604
„ 2	1·8130	0·02590
„ 3	1·3734	0·01962
„ 4	0·6335	0·00905
„ 5	1·1095	0·01585
„ 6	1·2152	0·01736
„ 7	1·5316	0·02188
Average	1·1570	0·01653
Maximum	1·8130	0·02590
Minimum	0·4228	0·00604

Rain.—Hulme, Manchester, 1857.

Rain from	Acidity—calculated as Sulphuric Acid.	
	Grains per Gallon.	Grammes per Litre.
Cisterns in Hulme :		
Number 1	1·6373	0·02339
„ 2	1·3734	0·01962
„ 3	1·6905	0·02415
„ 4	1·7962	0·02566
„ 5	2·5886	0·03698
„ 6	1·4259	0·02037
„ 7	1·8130	0·02590
„ 8	1·5316	0·02188
„ 9	1·9018	0·02717
„ 10	1·4791	0·02113
„ 11	2·4879	0·03547
„ 12	1·7962	0·02566
„ 13	2·1658	0·03094
Average	1·8211	0·02602
Maximum	2·5886	0·03698
Minimum	1·3734	0·01962

Rain.—Salford, Manchester, 1857.

Rain from	Acidity—calculated as Sulphuric Acid.	
	Grains per Gallon.	Grammes per Litre.
Cisterns in Salford:		
Number 1	0·5285	0·00755
„ 2	0·3169	0·00453
„ 3	2·6418	0·03774
„ 4	—	—
„ 5	2·6943	0·03849
„ 6	0·3169	0·00453
„ 7	1·3734	0·01962
„ 8	1·1095	0·01585
„ 9	1·1620	0·01660
„ 10	1·4791	0·02113
„ 11	1·0566	0·01509
„ 12	1·1620	0·01660
„ 13	1·2152	0·01736
„ 14	0·5285	0·00755
Average	1·1132	0·01590
Maximum	2·6943	0·03849
Minimum	0·3169	0·00453

Rain.—Ardwick, Manchester, 1857.

Rain from	Acidity—calculated as Sulphuric Acid.	
	Grains per Gallon.	Grammes per Litre.
Cisterns in Ardwick:		
Number 1	1·2679	0·01811
„ 2	2·1132	0·03019
„ 3	1·2679	0·01811
„ 4	2·3772	0·03396
Average	1·7565	0·02510
Maximum	2·3772	0·03396
Minimum	1·2679	0·01811

Rain.—Ancoats, Manchester, 1857.

Rain from	Acidity—calculated as Sulphuric Acid.	
	Grains per Gallon.	Grammes per Litre.
Cisterns in Ancoats:		
Number 1	2·1658	0·03094
„ 2	1·4791	0·02113
„ 3	3·1696	0·04528
„ 4	2·1132	0·03019
„ 5	1·2679	0·01811
„ 6	1·4791	0·02113
„ 7	3·5924	0·05132
Average	2·1810	0·02973
Maximum	3·5924	0·05132
Minimum	1·2679	0·01811

Rain.—Variations according with the presence of Chimneys, 1857.

Rain from	Acidity—calculated as Sulphuric Acid.	
	Grains per Gallon.	Grammes per Litre.
Cistern, Number 1	1·2679	0·01811
„ „ 2	1·1095	0·01585
„ „ 3	—	—
„ „ 4	1·4259	0·02037
„ „ 5	—	—
„ „ 6	2·0601	0·02943
„ „ 7	—	—
„ „ 8	0·7924	0·01132
„ „ 9	1·4791	0·02113
Average	0·9039	0·01291
Maximum	2·0601	0·02943
Minimum	0·7924	0·01132
Average for the whole	1·5268	0·02181

No. 1.

Place.	Hydrochloric Acid.		Sulphuric Acid.		Total Acid.		Proportion of Hydrochloric to Sulphuric Acid.
	Grains per Gallon.	Grammes per Litre.	Grains per Gallon.	Grammes per Litre.	Grains per Gallon.	Grammes per Litre.	
Cavendish Street, Manchester, June 8th 1851.	0.3976	0·00568	1·0752	·01536	1·4728	·02104	1 to 2·70
Cavendish Street, Manchester, June 9th, 1851.	0·5300	0·00759	1·0752	·01536	1·6052	·02295	1 to 2·02
Moss-side, just outside town, June 9th, 1851.	0·8960	0·01280	0·8960	·01280	1·7920	·02560	1 to 1·00

The above experiments were done many years since, and they may now be compared with the following taken at my laboratory, opposite All Saints' Church, about a mile from the Exchange, or centre:—

RAIN.—TABLE 2.—Manchester, 1868.

Month.	Hydrochloric Acid.		Sulphuric Acid.		Total Acid.		Proportion of Hydrochloric to Sulphuric Acid.
	Grains per Gallon.	Grammes per Litre.	Grains per Gallon.	Grammes per Litre.	Grains per Gallon.	Grammes per Litre.	
January	0·9002	0·01286	4·0110	0·0573	4·9112	0·07016	1 to 4·45
February	0·9790	0·01398	3·5224	0·0503	4·5014	0·06428	1 to 3·59
March	1·2775	0·01825	3·1103	0·0444	4·3883	0·06265	1 to 2·43
April	0·8516	0·01216	5·6000	0·0800	6·4516	0·04216	1 to 6·57
May	0·8516	0·01216	5·6000	0·0800	6·4516	0·09216	1 to 6·57
June							
July	—	—	—	—	—	—	—
August	0·15096	0·00216	1·4000	0·0200	1·55096	0·02216	1 to 9·27
September	0·02783	0·00039	1·8730	0·0268	1·90083	0·02719	1 to 67·30
October	0·73000	0·01043	2·8000	0·0400	3·53000	0·05043	1 to 3·83
November	0·76650	0·01095	2·2400	0·0320	3·00650	0·09295	1 to 2·92
December	0·51100	0·00730	2·8000	0·0400	3·31100	0·04730	1 to 5·47

The specimens of rain have not yet been examined from many places, but a few are here given:—

TABLE 3.

SULPHURIC and HYDROCHLORIC ACIDS in the Air.—Rain Waters.

Place.	Hydrochloric Acid.		Sulphuric Acid.		Total Acid.		Proportion of Hydrochloric to Sulphuric Acid.
	Grains per Gallon.	Grammes per Litre.	Grains per Gallon.	Grammes per Litre.	Grains per Gallon.	Grammes per Litre.	
Whiston; drawn from covered slate tank.	0·2510	·00360	1·3907	·01987	1·6417	·02347	1 to 5·54
Whiston; caught as it fell from the roof in a glass vessel.	0·8614	·01231	2·9890	·04270	3·8504	·05501	1 to 3·47
Close to a Chemical Work, March 21, 1868.	0·2380	·00340	5·1310	·07330	5·3690	·07670	1 to 21·56
Birkenhead Observatory, March 7, 1868.	0·2217	·00317	1·6210	·02315	1·8427	·02632	1 to 7·31
Liverpool	0·8085	·01155	2·4640	·03520	3·2725	·04675	1 to 3·04
Waterloo (Liverpool).	2·5550	·03650	0·8004	·01143	3·3554	·04793	1 to 0·31
Newcastle-on-Tyne, Dec. 1868.	0·5678	·00811	3·1111	·04444	3·6789	·05255	1 to 5·47
Row, Dumbarton; no wind, Jan. 16, 1868.	0·0638	·00091	0·3074	·00439	0·3713	·00530	1 to 4·80
Row, Dumbarton; E. wind, Jan. 16, 1868.	0·0511	·00073	0·2556	·00365	0·3067	·00438	1 to 5·00
Row, Dumbarton, Jan. 17, 1868; no wind.	0·0323	·00046	0·3360	·00480	0·3683	·00526	1 to 10·4
Manchester; average.	0·7046	·01006	3·3957	·04851	4·1003	·05857	1 to 4·8

Whiston is eight or ten miles from Liverpool; the amount of acid is higher than expected, and some explanation is needed. Waterloo,

on the shore near Liverpool, is instructive; the hydrochloric acid, or rather chloride, stands high, whilst the amount of sulphuric acid is low.

It must be remembered that free acids are not here spoken of, but total free and combined. The specimen from Gareloch, or Row on the Clyde, is remarkably free from chlorides and from sulphur, and may be taken as a standard from which to judge the rest. The amount of chlorine in sea water is greater than the amount of sulphates, and the origin of the latter is not clear. See 42.

It is here remarkable that whilst the hydrochloric acid is not much higher now than in 1851, the amount of sulphuric acid in the rain has greatly increased. Whether this is connected with the high death-rate, notwithstanding the greater care taken is to be considered, probably an explanation could be obtained from the London waters.

It is to be remarked, also, that the amount of acid diminishes with the increase of rain. The purity of the air during rain is certainly greater, as previously shewn.

It is easily seen why rain collected during months on the whole dry should show a greater amount of sulphuric acid; the rain passes air that has not been previously washed. But why should the hydrochloric acid be less in amount? The reason may be in the fact that the hydrochloric acid is chiefly the register of the common salt in the air, which would not be carried very high, whereas in very wet weather, when there was a high wind, a fresh supply would come from the sea.

In order to make some comparison, a table of the rain near Manchester is given from the reports of the Manchester Sanitary Association, chiefly Mr. Vernon's. The acid is appended.

RAIN.—Manchester, 1868.

Month.	No. of Wet Days.	Rainfall in Inches.	Average per Day.	Mean Temperature.	Proportion of Hydrochloric to Sulphuric Acid in the Rain.
		Old Trafford.	Inches.	F. Degrees.	
January	21	2·764	0·1316	38·375°	1 to 4·45
February	18	2·104	0·1170	42·820°	1 to 3·59
March	18	3·999	0·2222	44·225°	1 to 2·43
April	16	1·676	0·1047	45·800°	1 to 6·57
May	9	0·872	0·0970	54·160°	1 to 6·57
June	8	0·368	0·04600	58·675°	
July	5	0·454	0·09080	63·500°	—
August	19	2·359	0·1242	62·800°	1 to 9·27
September	—	—	—	58·450°	—
October	24	4·501	0·1875	46·850°	1 to 3·83
November	18	3·108	0·1727	41·325°	1 to 2·92
December	—	—	—	—	—

Rain.—Hydrochloric Acid.

Relation to the Average of that from Row, Dumbartonshire, taken as 100.

Row, Dumbartonshire	100·00	1
Birkenhead	461·87	$4\frac{1}{2}$
Near an Alkali Work	495·83	5
Whiston (from covered tank)	512·24	5
Newcastle-on-Tyne	1158·77	$11\frac{1}{2}$
Manchester	1438·00	$14\frac{1}{3}$
Liverpool	1684·30	17
Waterloo	5214·30	52

Rain.—Sulphuric Acid.

Relation to that from Row, Dumbartonshire, taken as 100.

Row, Dumbartonshire	100·00	1
Waterloo	229·34	$2\frac{1}{4}$
Whiston	398·28	4
Birkenhead	464·47	$4\frac{1}{2}$
Liverpool	706·02	7
Newcastle-on-Tyne	891·43	9
Manchester	973·00	$9\frac{3}{4}$
Near an Alkali Work	1470·00	$14\frac{7}{10}$

Rain.—Total Acid.

Relation to that in Rain from Row, Dumbartonshire, which is taken as 100.

Row, Dumbartonshire	100·00	1
Whiston	470·67	$4\frac{3}{4}$
Birkenhead	528·29	$5\frac{1}{4}$
Liverpool	938·21	$9\frac{2}{5}$
Waterloo	961·98	$9\frac{1}{2}$
Newcastle-on-Tyne	1054·73	$10\frac{1}{2}$
Manchester	1175·54	$11\frac{3}{4}$
Near an Alkali Work	1539·27	$15\frac{2}{3}$

The tables of comparative amounts of hydrochloric and sulphur acid in rain waters seem to me so instructive that a great deal of the other and very long and laborious work might have been saved.

We see a difference in such a climate as that of Manchester and Gareloch at once. I must not presume to say that these numbers represent all the difference, but they represent a difference caused by manufactures and processes of life. At Waterloo, near the sea, hydrochloric acid appears high, but it must be remarked that in none of the cases is all the acid free; the numbers represent that which is both free and combined. At Waterloo it is combined, or simply salt from the sea. At Blackpool it was not shown to be high, as the wind was not from the sea.

It comes out clearly that there is a certain amount of chlorides in the air beyond what the sea sends, even when no alkali or glass

works are near. The exact source of these is not directly ascertained; probably it is from coals, although analyses usually made do not show in coal sufficient to account for this. It is in all probability the common salt from the ancient seas in which the coal plants grew or fell. The amount, however, does not by the analyses increase proportionately with the coal; and if my observations of 1851 are correct it has not increased much since, whereas the sulphuric acid has increased greatly, and evidently with the coal. Very probably more exact experiments in 1851 would have made this clearer.

I think we have here in our hands a sure mode of knowing if any amount of damage is being done to any place, and by what acid. At one spot, for example, which is indicated in the tables, I see that the muriatic acid is much less than the average of Liverpool or Manchester, whilst the sulphuric acid is more. I know, therefore, that if mischief is done it is not by the acid which it is my business to suppress. This explains the practical use which it is intended to make of these observations as a beginning. I by no means intend to say that the same will be found near all alkali works.

Ammonia, Salts, &c., in Rain Water.

The amounts of sulphuric and muriatic acid in the rain have been given, but much attention has not been paid to the substances with which they are combined. In a paper read in 1852, I speak of sulphates of ammonia and alkaline and earthy salts in the rain, along with organic matter "in a state peculiarly organizable," meaning that organisms rapidly shewed themselves. I also mention alkaline air in the fields, sulphate in the suburbs, and acid sulphate in the town.

The method of testing for ammonia used by Nessler gives us an easy method of estimating that alkali, and the plan of decomposing the albuminoids found by Wanklyn enables us to separate the organic from the inorganic nitrogen. I give the amount of ammonia obtained when 200 c. c. of the water were used. It is a mere beginning; accuracy is got only by hundreds of results.

Ammonia in Rain Waters.

Place.	Date.	Ammonia—Parts in 1,000,000, or Grammes in a Cubic Meter.	Ammonia of Albumen.
Row, near Helensburgh -	Jan. 16th, 1869	0·00	0·
Clydeford, Glasgow - -	Jan. 1869	1·25	0·0
London Hospital - -	Feb. 1869	2·	0·3
Do. - - -	,, ,,	2·2	0·3
Do. - - -	,, ,,	3·	0·4
Glasgow, St. Rollox - -	Dec. 1868	3·75	0·
,, Netherfield - -	Jan. 1869	5·5	0·
Manchester - - -	Dec. 1868	6·0	1·
Newcastle-on-Tyne - -	Dec. 1868	5·0 & 0·6	0·

More water was required in order to obtain the ammonia at Row, &c.

Here we have it clearly put before us that the towns contain a great deal of ammonia. This comes mainly, I suppose, from the coal burnt, and the larger quantity in Manchester air agrees with other results. The second column, however, gives the ammonia from albumen, and we see that the Manchester amount is in that respect greatest also. It was not my intention to examine this subject for this report, but these facts come in incidentally, being connected with the question of coal. If these results are confirmed by many cases over the country, it will be difficult to avoid drawing very distinct conclusions affecting several sanitary questions. I give only my first results. I find, for example, that the salts in the last Glasgow specimens are highest, but the acidity low.

I may, however, add that these results are exactly the same in meaning that I obtained in 1851, although the knowledge of analysis having increased they are more minute.

Since that period Gernez has found sulphate of soda in the air; I always found fixed alkalis, and speaking of animalcules, said, "These creatures are sufficient of themselves to show the existence "of phosphates, whilst sulphates and lime may be readily ob- "tained." Oxide of iron is very distinct, and all the substances found in coal ashes. When 200 cubic centimetres of rain water are boiled down to a few drops, and the whole allowed to evaporate spontaneously, a mass of crystals is obtained. I have given drawings of these crystals seen through a microscope with a magnifying power of half-inch focus. When the crystals are heated and the residue sublimed the ammoniacal salts come off. In the case of Manchester, the sublimed matter was chloride of ammonium, showing that in all probability the free acid is hydrochloric; the sulphuric acid having seized the base and set the hydrochloric acid free. Sulphate of soda is the principal residuum.

The appended drawings show the different appearances when a drop of the concentrated rain is allowed to evaporate on a piece of glass. The crystals appear different in all places tried.

When the air around works is examined it is necessary to keep information such as this in mind, and I can scarcely think it out of place here. The question regarding the effect of such substances on health is one which cannot receive a very ready answer.

Under examination is a specimen from N. Uist. The crystals are large cubes of common salt only. At Row they are clearly common salt, but the crystals less complete. Before great towns are reached the land changes the rain. Other rain specimens are left out as they could not be finished fully in time.

Examination of the Acids in the Air.

With the above results from the rain before us, we see the advantage of examining air chemically, instead of merely by trials

RAIN-WATER CRYSTALS.

FIG. 1.

MANCHESTER RAIN.

FIG. 2.

MANCHESTER RAIN.—FIXED RESIDUE, OXIDE OF IRON REMOVED.

Fig. 3.

London Rain—Fixed. London Hospital.

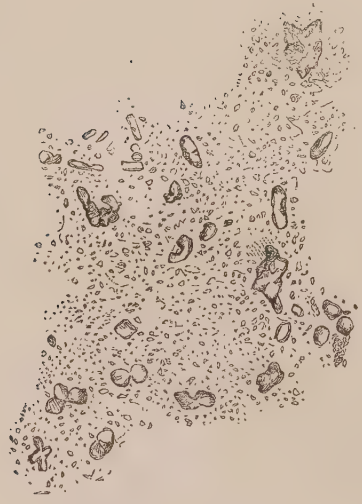
Fig. 4.

Sublimate from London Rain.

FIG. 5.

NEWCASTLE RAIN.

FIG. 6.



ROW RAIN, GARELOCH CLYDE.

on our own health or on plants. The rain does in reality give us the washings of the air: with pure air we have pure rain. This leads to a sanitary inquiry of far wider extent than any question which it is my business to discuss at present. As it is not desirable to be dependent on conditions of the atmosphere, in making inquiries it was needful to adopt a mode of washing the specimens of air to be examined. Besides, it is found that gases from works escape fitfully, and frequently occupy a very small part of the atmosphere and to no great height, whereas it may be proved that the rain brings down matter from a considerable height in the atmosphere.

Having in 1866 fallen on what I believed a very simple plan of collecting the impurities from the air, a short account of it was published at the time; and as it occurred to me that it might be used for examining the air in towns or around works complained of, the following trials were made. It will save me the trouble of rewriting prefatory matter if a part of a paper read last year to the Literary and Philosophical Society of Manchester is quoted here.

"A Search for Solid Bodies in the Atmosphere," by R. Angus Smith, Ph.D., F.R.S., &c.

I have so frequently for many years attempted to find, and have found, organic substances which have passed from the air into liquids in which they were collected, that perhaps the Society will scarcely attend to another attempt, although it indicates, I think, some progress. It was in the year 1847 that I first collected what I believe was matter from the respiration and perspiration, and found that as it was kept it grew into distinct confirmed forms.

Whilst examining some matters relating to the cattle plague I found one or two remarkable points. I had before that time used aspirators to pass the air through liquids, except in the oxidation experiments. At that time I used simply a bottle which contained a little water. The bottle was filled with the air of the place and the water shaken in it. The difference of air was remarkable. A very few repetitions would cause the liquid to be muddy, and the particles found in many places were distinctly organic.

Mr. Crookes also brought me some cotton through which air from an infected place had passed. It was examined at the same time. Taking cotton in the mass nothing decided was seen; but when it was washed some of the separate films were coated over with small nearly round bodies, presenting no structure, or at least only feeble traces of it, and perhaps to be called cells. I had not sent gun-cotton, as I intended, to Mr. Crookes, fearing the rules of the post; otherwise there would have been more certainty that the bodies spoken of did not exist previously on the cotton. However, Mr. Dancer, who has examined cotton with the microscope oftener than most persons, even of those experienced in the subject, had never observed a similar appearance.

The liquid had also a number of similar bodies floating in it.

It was then that Mr. Crookes sent a liquid which he had condensed from the air of an infected cowshed at a space a little above the head of a diseased cow. It was also examined, and it presented similar indications of very numerous small bodies. Not being a professed microscopist I shall not attempt a description, but add that they clearly belonged to the organic world, and were not in all cases mere debris. We found also

one body a good deal larger than the rest; it resembled somewhat a paramecium, although clearly not one.

We found no motion whatever, and only this latter substance could be adduced as an absolute proof of anything organized being present. Next day I examined the same liquid; and, whether from the fact of time being given for developement or from other causes, there was a very abundant motion. There were at least six specimens in the field at a time, of a body resembling the euglena, although smaller than I have seen it. When these minute bodies occur it is clear that more may exist, and germs in this early stage are too indefinite to be described. The existence of vital sparks in the organic substances in the air alluded to is all I wish to assert, confirming by a different method the observations of others. It might, of course, be said that since the bottle was opened at Mr. Dancer's the air at that place may have communicated them. I answer that, before it was opened, a good glass could detect floating matter, some of it, however, as in the microscope proved, indefinite enough.

Finding this, and fearing that the long time needful to collect liquid from the atmosphere might expose it also to much dust, I used a bottle of about 100 cubic inches dimensions, and putting with it a very little water, not above five cub. centimetres, I pumped out the air of the bottle, allowing the air of the place to enter. This was done six times for each sample, the water shaken each time, and the result examined. This was done with the same bottle that was used in my early experiments with permanganate, and by the same method, except that water instead of that salt was used. At first considerable numbers of moving particles were found; but it was needful to examine the water used, and here occurred a difficulty. It was not until we had carefully treated with chemicals and then distilled the water again and again that we could trust it. Particles seemed to rise with the vapour, and if so, why not with the evaporating water of impure places.

Having kept an assistant at the work for a week, and having myself examined the air of three cow-houses, I came to the conclusion that the air of cow-houses and stables is to be recognized as containing more particles than the air of the street in which my laboratory is, and of the room in which I sit, and that it contains minute bodies, which sometimes move, if not at first, yet after a time, even if the bottle has not been opened in the interval. There is found in reality a considerable mass of debris with hairs or fine fibres, which even the eye, or at least a good pocket lens, can detect. After making about two dozen trials, we have not been able to obtain it otherwise. Even in the quiet office at the laboratory there seemed some indications.

I found similar indications in a cow-house with healthy cows; so I do not pretend to have distinguished the poison of cattle plague in these forms; but it is clear that where these exist there may be room for any ferment or fomites of disease; and I do not doubt that one class is the poison itself in its earliest stage. It would be interesting to develope it farther.

I have recorded elsewhere that I condensed the liquid from the air of a flower garden, and found in it, or imagined I found, the smell of flowers. I do not remember that I looked much to the solid or floating particles, thinking them to be blown from the ground, but it does not affect the result, whether they be found constantly in the air or are raised by the action of currents.

Lately I tried the same plan on a larger scale. A bottle of the capacity of 4990 c.c. was filled with air and shaken with water. The

bottle was again filled and shaken with the same water, and this was repeated 500 times, nearly equal to 2½ million cbc., or 2,495 litres. As this could not be done in a short time, there was considerable variety of weather, but chiefly dry, with a westerly wind. The operation was conducted behind my laboratory, in the neighbourhood of places not very clean, it is true, but from which the wind was blowing to other parts of the town. I did not observe any dust blowing, but if there were dust, it was such as we may be called on to breathe. The liquid was clouded, and the unaided eye could perceive that particles, very light, were floating. When examined by a microscope the scene was varied in a very high degree—there was evidently organic life. I thought it better to carry the whole to Mr. Dancer and to leave him to do the rest, as my knowledge of microscopic forms is so trifling compared to his.

Having asked Mr. Dancer to undertake the examination by the microscope, he wrote the following, and sent it to the Philosophical Society of Manchester, where mine was sent:—

"Microscopical Examination of the Solid Particles from the Air of Manchester," by J. B. Dancer, F.R.A.S.

The air had been washed in distilled water, and the solid matter which subsided was collected in a small stoppered bottle, and on the 13th of this month Dr. Smith requested me to examine the matter contained in this water. An illness prevented me from giving it so much attention as I could have wished.

The water containing this air-washing was first examined with a power of 50 diameters only, for the purpose of getting a general knowledge of its contents; afterwards magnifying powers varying from 120 to 1,600 diameters were employed.

During the first observations few living organisms were noticed; but, as it afterwards proved, the germs of plant and animal life (probably in a dormant condition) were present.

I will now endeavour to describe the objects found in this matter, and begin in the order in which they appeared most abundant.

1st. *Fungoid Matter.*—Spores or sporidiæ appeared in numbers, and, to ascertain as nearly as possible the numerical proportion of these minute bodies in a single drop of the fluid, the contents of the bottle were well shaken, and then one drop was taken up with a pipette; this was spread out by compression to a circle half an inch in diameter. A magnifying power was then employed, which gave a field of view of an area exactly 100th of an inch in diameter, and it was found that more than 100 spores were contained in this space; consequently the average number of spores in a single drop would be 250,000. These spores varied from 10,000th to 50,000th of an inch in diameter. The peculiar molecular motion in the spores was observable for a short time, until they settled on to the bottom of the glass plate; they then became motionless.

The Mycelium of these minute fungi were similar to that of rust or mildew (as it is commonly named), such as is found on straw or decaying vegetation.

When the bottle had remained for 36 hours in a room at a temperature of 60° the quantity of fungi had visibly increased, and the delicate

mycelial thread-like roots had completely entangled the fibrous objects contained in the bottle and formed them into a mass.

On the third day a number of ciliated zoospores were observed moving freely amongst the sporidiæ. I could not detect any great variety of fungi in the contents of the bottle, but I cannot presume to say that all the visible spores belonged to one species; and as there are more than 2,000 different kinds of fungi, it is possible that spores of other species might be present, but not under conditions favourable for their development. Some very pretty chain-like threads of conidia were visible in some of the examinations.

The next in quantity is vegetable tissue. Some of this formed a very interesting object, with a high power, and the greater portion exhibited what is called pitted structure. The larger particles of this had evidently been partially burnt and quite brown in colour, and were from coniferous plants, showing with great distinctness the broad marginal bands surrounding the pits; others had reticulations small in diameter. They reminded me of perforated particles so abundant in some kinds of coal.

The brown or charred objects were probably particles of partially burnt wood used in lighting fires.

Along with these reticulated objects were fragments of vegetation, resembling in structure hay and straw and hay seeds, and some extremely thin and transparent tissue showing no structure. These were doubtless some portions of weather-worn vegetation. A few hairs of leaves of plants and fibres, similar in appearance to flax, were seen, and, as might have been expected in this city, cotton filaments, some white, others coloured, were numerous; red and blue being the predominant colours. A few granules of starch, seen by the aid of the polariscope, and several long elliptical bodies, similar to the pollen of the lily, were noticed. After this dust from the atmosphere had been kept quiet for three or four days, animalculæ made their appearance in considerable numbers, the monads being the most numerous. Amongst these we noticed some comparatively large specimens of paramecium aurelia, in company with some very active rotiferæ; but after a few days the animal life rapidly decreased, and in 12 days no animalculæ could be detected.

Hairs of Animals.—Very few of these were noticed, with the exception of wool; of this both white and coloured specimens were mixed up along with the filaments of cotton.

After each examination as much of the drop of water as could be collected by the pipette was returned to the bottle, in order to ascertain if any new development of animal or vegetable life would take place, and the stopper of the bottle was replaced as quickly as possible to prevent the admission of the particles from the air in the room; and I am tolerably certain that the objects named in this paper are those which the bottle contained when Dr. Smith brought it to me.

The particles floating in the atmosphere will differ in character according to the season of the year, the direction of the wind, and the locality in which they are collected, and, as might be expected, are much less in quantity after rain.

The small amount of fluid now remaining in the bottle emits the peculiar odour of mildew, and at present the fungoid matter appears inactive.

For the purpose of obtaining a rough approximation of the number of spores, or germs of organic matter contained in the fluid received

from Dr. Smith, I measured a quantity by the pipette, and found it contained 150 drops of the size used in each examination. Now, I have previously stated that in each drop there were about 250,000 of these spores, and as there were 150 drops, the sum total reaches the startling number of 37½ millions, and these, exclusive of other substances, were collected from 2,495 litres of the air of this city*—a quantity which would be respired in about 10 hours by a man of ordinary size when actively employed. I have to add that there was a marked absence of particles of carbon amongst the collected matter.

Continuing further, the air of Manchester near my laboratory was frequently examined, that is, frequently considering the time necessary for every experiment. A small amount of water, 100 cubic centimetres, was put into the bottle and shaken with the air of the bottle. The air was pumped out so as to allow another quantity to enter, and washed again, and so on. It was observed after a few bottles of air had been washed that the water became dull of colour, and in some places this was more so than in others. No other method tried has produced such good results comparative for minute quantities; the value consists in the violence with which the air is shaken with the water, so as to ensure contact and complete washing. Other plans obtain very few organic particles. Shaking washes the air, and enables us to find the substances in solution, but destroys the accuracy of measurement, at least, if done in the above way. Professor Tyndall found the same difficulty in washing air, but the method he adopted would not suit this case. When the proper amount was washed a little of the liquid was taken out for microscopic examination and the rest was filtered. The acids were estimated by the method which I have elsewhere described and which I have called minimetric. A marked volume of pure water was put into a large test tube, and with it a little nitrate of silver, and the liquid with the washings of the air was poured from a graduated burette until a cloud was seen in the liquid.

The calculations in the table have been made to 1,000,000 cubic feet, but I wish it to be understood that I do not depend on this number; that measurement may be left out. I believe that the mode of measurement is far from correct. In filling the bottle the air flows on the sides, and much more passes than we can account for. The comparative results, however, are in my opinion very interesting and valuable, and afford us a new mode of learning the nature of the atmosphere we breathe. There is much still to do; the microscope ought to have been used for every specimen, and careful drawings made. I am inclined to think that by such examinations we shall at least be assisted to all the questions regarding spores and germs in the atmosphere as well as salts and solids.

---

* Behind Dr. R. Angus Smith's laboratory.

No.	Place.	Date, 1868.	Weather and Time of Day.	Remarks.
1	Grosvenor Square, Manchester.	March	- - - - -	- - - - -
2	„ „	April 2	Cloudy during the morning and afternoon.	- - - - -
3	„ „	Oct. 5	Bright day, 12 to 6 p.m.	East wind - - -
4	„ „	„ 7	Fine day, 3.30 to 5.30 p.m.	West wind - - -
5	„ „	„ 20	Mist, 10.30 to 12 noon	West wind; rain night before
6	„ „	Nov. 20	Fine, 10.15 a.m. to 12.30 p.m.	- - - - -
7	„ „	„	- - - - -	- - - - -
8	„ „	Nov. 23	Dull, 2.45 to 4 p.m. -	- - - - -
9	„ „	„ 26	- - - - -	- - - - -
10	York Place - -	Oct. 12	Fine, 2.30 to 4.30 p.m.	South-west wind - -
11	„ - - -	Nov. 12	Fine, 3.0 to 4.15 p.m.	North wind - - -
12	„ - - -	„ 13	Fine, 3.0 to 4.15 p.m.	North wind - - -
13	Greenheys fields, near Manchester, on S. side.	Oct. 12	Fine, 2.30 to 4.30 p.m.	South-west wind - -
14	In a field between Stretford and Didsbury.	„ 1	Cloudy - -	North-east wind; cold -
15	„ „	„ 5	Dull damp morning, but bright afternoon, 1 to 3 p.m.	N.E. wind; rain during the previous night.
16	„ „	„ 22	Showery, 12.30 to 3 p.m.	High west wind; very wet all the previous day. Straws got into jar.
17	„ „	Nov. 26	Fair, 3.30 to 4.45 p.m.	Mist fell during last half hour, and brought an odour of decaying vegetable matter.
18	St. Helens, open space behind schools.	Oct. 15	Raining heavily, 10.30 a.m. to 1 p.m.	West wind - - -
19	Field about one mile east of station.	„ 15	Fair, 2.30 to 4 p.m. -	High west wind - -
20	Behind St. Helens schools.	Dec. 7	Fine, 10.30 to 12 noon.	Light S.W. wind. Smoke from works came once or twice.
21	East of railway -	„ 7	Fine, 3 to 5.15 p.m. -	West wind. A little smoke from works during the time.
22	Behind St. Helens schools.	„ 8	Rain, 10 to 11 a.m. -	Raining all time. W. wind
23	Mile N. of St. Helens -	„ 8	Rain, 12 to 1.30 p.m.	Raining all time. Wind changed to E.
24	Hill near Poole's Cavern, S. of Buxton.	Oct. 29	Showers of hail and rain, 11 a.m. to 2 p.m.	High west wind - -
25	Field below Buxton Lime Co.'s quarry, E. of Buxton.	„ 29	2 p.m. to 5 p.m. -	Very high west wind, and heavy hailstorm.
26	On top of a hill S. of Buxton, and a little W. of a quarry.	Nov. 23	Dull and damp, 11 to 12 a.m.	Strong N.W. by W. wind. Not so much air washed as usual on account of smoke coming over the hill.
27	On the side of a hill N. of Buxton.	„ 23	Clear, 4 to 5.15 p.m.	A most beautiful sunset. No wind.
28	On the top of a hill at Burbage, W. of Buxton, and N. of lime quarries.	„ 23	Dull, 1 to 2.15 p.m. -	Day got brighter about 2 p.m. Wind in light gusts from the N.W.
29	On the cliffs near Uncle Tom's Cabin, N. of Blackpool.	Dec. 1	Raining till 11 a.m., 11 to 1 p.m,	This is about 30 yards from the sea. S. wind (not coming directly from the sea).
30	In a field N. of Blackpool.	„ 1	3 to 4.30 p.m. fine -	Field about 600 yards from above. Tide out. Light S. wind.

Acid in the Air.

Method.

Proportion of Hydrochloric Acid to Sulphuric Acid.	Hydrochloric Acid.		Sulphuric Acid.		Total Acid.		No.
	Grains in ? Cub. f.	Grammes in ? Co. Met.	Grains in ? Cub. f.	Grammes in ? Co. Met.	Grains in ? Cub. f.	Grammes in ? Co. Met.	
1 to 13·99	49·43	0·1129	682·80	1·5642	732·23	1·6772	1
1 to 1·95	42·65	0·0976	—	—	—	—	2
1 to 0·46	180·90	0·4142	353·70	0·8099	534·60	1·2242	3
1 to 17·34	155·50	0·3560	75·00	0·1717	230·50	0·5278	4
1 to 67·02	88·10	0·2017	1526·00	3·4945	1614·10	3·6962	5
1 to 3·04	59·30	0·1369	4008·30	9·1783	4068·10	9·3152	6
1 to 6·66	185·20	0·4241	562·5	1·2881	747·70	1·7122	7
1 to 11·11	59·00	0·1351	393·4	0·9008	452·40	1·0359	8
- - -	135·50	0·3102	1505·5	3·4475	1641·00	3·7578	9
- - -	- - -	- - -	55·7	0·1274	—	—	10
1 to 13·44	77·80	0·1781	1045·5	2·3941	1123·30	2·5723	11
1 to 3·63	185·2	0·4241	562·5	1·2881	747·70	1·7122	12
1 to 12·30	79·5	0·1820	978·2	2·1200	1057·70	2·3021	13
1 to 3·19	112·6	0·2578	359·5	0·8232	472·10	1·0811	14
1 to 3·97	98·5	0·2255	391·7	0·8969	490·20	1·1225	15
1 to 13·91	51·0	0·1167	709·4	1·6245	760·40	1·7413	16
1 to 15·38	57·27	0·1311	881·1	2·0177	938·37	2·1488	17
1 to 7·26	170·3	0·3899	1236·3	2·8311	1406·60	3·2211	18
1 to 14·10	66·8	0·1529	942·0	2·1571	1008·80	2·3101	19
1 to 11·49	199·48	0·4568	2292·91	5·2507	2492·39	5·7075	20
1 to 5·32	129·66	0·2969	689·93	1·5799	819·59	1·8768	21
1 to 2·34	285·04	0·6536	666·77	1·5269	951·81	2·1805	22
1 to 4·76	39·95	0·0914	190·00	0·4351	229·95	0·5265	23
1 to 30·55	31·78	0·0727	971·0	2·2235	1002·78	2·2963	24
1 to 29·63	54·57	0·1249	1617·1	3·7031	1671·67	3·8281	25
1 to 0·66	312·5	0·7156	207·3	0·4747	519·80	1·1903	26
1 to 1·18	65·6	0·1502	77·5	0·1774	143·10	0·3276	27
1 to 2·96	132·7	0·3038	393·3	0·9006	526·00	1·2045	28
1 to 6·94	37·36	0·0855	259·45	0·5941	296·81	0·6796	29
1 to 7·66	20·27	0·0464	155·30	0·3556	175·57	0·4020	30

If we take the averages as we find them in the summary, we arrive at a very interesting result and a satisfactory proof that the method is comparatively correct. We see at once why Blackpool should be better than Manchester. There is less of everything in the air when the wind blows from the south, not from the sea. I do not doubt that in some cases the chlorides would rise very high, as they did at Waterloo. It is not clear why York Place, in Manchester, should be so high in hydrochloric acid. The number of specimens was small, and it probably is not a good average. Manchester shows its pre-eminence in diffused sulphuric acid, but St. Helens in diffused hydrochloric, as there are in it alkali works, glass works, bottle works, and potteries, besides being nearer to the sea. Didsbury is about five miles south from Manchester, not much exposed to smoke.

Summary of Comparative Results.

Air.—Total Acid.

Relation to Blackpool taken as 100.

Blackpool	100
Didsbury	315
Buxton	333
St. Helens	474
Manchester	527

Air.—Hydrochloric Acid.

Relation to Blackpool taken as 100.

Blackpool	100
Buxton	247
Didsbury	277
Manchester	369
St. Helens	516

Air.—Sulphuric Acid.

Relation to Blackpool taken as 100.

Blackpool	100
Didsbury	320
Buxton	345
St. Helens	468
Manchester	549

Perhaps these summaries are not so clear as I expected them to be, as the comparative amount of sulphuric and muriatic or hydrochloric acid is not given. Each is compared with itself only. The actual relations in the same volume of air are:—

——	Hydrochloric Acid.	Sulphuric Acid Anhydrous.
Manchester	110·83	979·17
St. Helen's	148·54	1,002·99

The proper amount to subtract for coal vapour is not well known, but probably 38 is the amount of muriatic acid due to manufactures in St. Helens. The actual streams of gas here have not been taken. At Eccleston in 1868, about the end of May or beginning of June, there was one of muriatic acid, if we can give full confidence to the results from the covered jars: no similar result has been got from rain. By these means we shall trace to their source some of the evils.

If we add the results of the two foregoing tables and take Blackpool as 100, we obtain the following table, which may be said to give a comparative relation of the amount of chlorides and sulphates, as well as their free acids, in the air in these five districts. It must not be forgotten that both salts appear in the best air, although free hydrochloric and sulphuric acid do not.

Blackpool - - - -	100	1
Buxton - - - -	296	3
Didsbury - - - -	299	3
Manchester - - - -	459	$4\frac{1}{2}$
St. Helens - - - -	492	5

Acid in Air.—Exposed Jars.

Mr. Fletcher also began a mode of examining the air. This was by exposing carbonate of potash in jars well covered by a lid which was larger than the vessel and came below the rim, leaving the space equal to one inch between the lid and vessel: air was allowed to pass over whilst dust could not fall upon the surface, although it could be blown along with the air under the lid. The vessels were made with four raised parts round the edge, and on these the large lid rested overshadowing the whole.

Exposed Jars.—Results sent by Mr. Fletcher.

No. of Experiment.	Place.	Date, 1868.	Time in Days.	Proportion of Hydrochloric Acid to Sulphuric Acid.
1	$\frac{3}{4}$ mile S.E. of St. Helens		12	1 to 5·84
2	In the town of St. Helens		9	1 to 7·06
3	,, ,,		70	1 to 6·37
4	,, ,,		70	1 to 7·15
5	,, ,,		9	1 to 19
6	At Widnes - -		9	1 to 8
7	Near Norton Priory -		53	1 to 4·95
8	,, ,,		95	1 to 4·79
9	In plantation at Eccleston Hall.		95	1 to 6·96
10	,, ,,		53	1 to 6·00
11	At Whiston - -		10	1 to 6·53

This was considered a very useful comparative mode of examining air in places not easily approached. I therefore carried it out in Manchester, with the following results. It was found, however, that there was more dust by this mode than by other modes during high wind.

Jars Exposed.

No. of Experiment.	Place.	Date, 1868.	Time, in Days.	Hydrochloric Acid.	Hydrochloric Acid.	Sulphuric Acid.	Sulphuric Acid.	Total Acid.	Total Acid.	Proportion of Hydrochloric to Sulphuric Acid.
				Grains.	Grammes.	Grains.	Grammes.	Grains.	Grammes.	
1	Whiston - -	Feb. 25 to March 17	21	0·0053	0·00034	0·0463	0·0030	0·0517	0·0033	1 to 8·66
2	Whiston - -	March 17 to April 1	14	0·0054	0·00036	0·0526	0·0034	0·0580	0·0037	1 to 9·67
3	Widnes - -	Feb. 26 to March 16	19	0·0100	0·00065	0·0721	0·0046	0·0821	0·0053	1 to 7·17
4	St. Helens - -	Feb. 25 to March 17	21	0·0102	0·00066	0·0475	0·0030	0·0577	0·0037	1 to 4·64
5	Cowley Hill, near St. Helens.	„ „	21	0·0066	0·00042	0·0413	0·0026	0·0479	0·0031	1 to 6·24
6	Peasly Cross, near St. Helens.	Feb. 14 to Feb. 26	12	0·0500	0·00324	0·3250	0·0210	0·3750	0·0243	1 to 6·50
7	Wall 10ft. high, main street, St. Helens.	„ „	12	0·0500	0·00324	0·3910	0·0253	0·4410	0·0285	1 to 7·80
8	Low roof, 15ft. high, main street, St. Helens.	„ „	12	0·0375	0·00243	0·7410	0·0480	0·7785	0·0504	1 to 19·78
9	Eccleston Hall, on top of post, 20ft. high.	May 6 to June 26	51	0·0413	0·00267	0·0293	0·0019	0·0706	0·0045	1 to 0·71
10	Manchester, 22 Grosvenor Square.	March 26 to April 14	19	0·0214	0·00138	0·0883	0·0057	0·1097	0·0071	1 to 4·12
11	Manchester, 22 Grosvenor Square.	„ „	19	0·0218	0·00141	0·0964	0·0062	0·1183	0·0076	1 to 4·40

EXPOSED JARS of WATER.—Calculated to 100 Days.

No. of Experiment.	Hydrochloric Acid absorbed, calculated to 100 Days.	Hydrochloric Acid absorbed, calculated to 100 Days.	Sulphuric Acid absorbed, calculated to 100 Days.	Sulphuric Acid absorbed, calculated to 100 Days.	Total Acid absorbed, calculated to 100 Days.	Total Acid absorbed, calculated to 100 Days.
	Grains.	Grammes.	Grains.	Grammes.	Grains.	Grammes.
1	0·0255	0·0023	0·2208	0·0143	0·2463	0·0166
2	0·0385	0·0024	0·3760	0·0243	0·4145	0·0268
3	0·0528	0·0034	0·3794	0·0245	0·4323	0·0280
4	0·0487	0·0031	0·2263	0·0146	0·2750	0·0178
5	0·0315	0·0020	0·1969	0·0127	0·2284	0·0148
6	0·4166	0·0269	2·7082	0·1754	3·1248	0·2024
7	0·4166	0·0269	3·2582	0·2111	3·6748	0·2381
8	0·3124	0·0204	6·1747	0·4001	6·4872	0·4206
9	0·0810	0·0052	0·0575	0·0037	0·1385	0·0089
10	0·1126	0·0072	0·4647	0·0301	0·5773	0·0374
11	0·1147	0·0074	0·5074	0·0328	0·6221	0·0402

EXPOSED JARS.—TOTAL ACID.—Whiston as 100.

Whiston - - -	100
Eccleston Hall - - -	175
Manchester - - -	927·0
St. Helens - - -	1539·7
Near St. Helens - - -	508

The result seems to be here, as by other processes, that the sulphuric acid rises as the towns are approached, although near St. Helens, and no doubt near other places where alkali, glass, pottery, &c. are made there will be an increase of muriatic acid. The muriatic acid is not found to rise so high as the sulphuric, with one exception. This seems a very good clue to the condition of districts, and the enquiry will be continued for a while.

Acid in Air by Aspirator.

It was of course desired to obtain a more exact measurement of the air which was washed than had as yet been obtained, and for this purpose an aspirator was used. I give the results, but am by no means satisfied even now that the measurements are quite correct. It seems to me quite needful to shake the air with the solution very long and thoroughly. If we pass strong soluble gases through liquids by means of an aspirator we find that one passage through water takes up nearly all, especially if the motion is so rapid that there occurs a little frothing. The bubbles extend the absorbing surface. But if we wish to take up the remaining trace of gas we find great difficulty. Now it is the remaining trace, as we may say, which is found in the air, and a very small trace it certainly is.

Air.—Water Aspirator.

Place.	Date, 1868.	Weather.	Remarks.	Hydrochloric Acid.		Sulphuric Acid.		Proportion of Hydrochloric to Sulphuric Acid.
				Grains in 1,000,000 Cubic Feet.	Grammes in 1,000 Metres.	Grains in 1,000,000 Cubic Feet.	Grammes in 1,000 Metres.	
Manchester : Grosvenor Square -	- - -	- - -	Solution of nitrate of silver used. Solution became dark.	34·00	·08786	—	—	—
Back of Laboratory	- - -	- - -	Very dilute solution of soda used.	56·34	·129018	—	—	—
„ „	From June 29th to July 8th.	Fine ; warm -	E. wind during four days, W. wind during five days.	9·90	·022671	420·50	·962945	1 to 42·47
„ „	From July 14th to August 1st.	Fine, and very warm	Solution of soda used. W. wind.	12·66	·028991	298·00	·682420	1 to 23·53
„ „	From Oct. 21st to Oct. 30.	Wet most of the time	Pure water used. W. and N.W. winds.	18·51	·042388	—	—	—
„ „	Nov. 18th and 19th -	Fine; cold - -	Pure water used. N. and N.E. winds.	14·55	·033319	—	—	—

In the first two experiments no long tube branching out from the washing bottle was attached, but in the case of the other four such a tube was used. It has been found that such a tube retains the HCl, hence the difference in the quantities. If the average of the first two amounts of hydrochloric acid be taken and compared with the average of the two sulphuric acid determinations, the proportion of HCl to SO_3 is as 1 to 7·95.

Air.—Water Aspirator.—Tube and Empty Bottle Experiments.

Date.	Weather.	Hydrochloric Acid retained by Empty Bottle and Tube.		Hydrochloric Acid retained by Pure Water.		Total Hydrochloric Acid.		Sulphuric Acid retained by Bottle and Tube.		Sulphuric Acid retained by Pure Water.		Total Sulphuric Acid.		Proportion of Hydrochloric Acid to Sulphuric Acid in the Air.
		Grains in 1,000,000 Cubic Feet.	Grammes in 1,000 Metres.	Grains in 1,000,000 Cubic Feet.	Grammes in 1,000 Metres.	Grains in 1,000,000 Cubic Feet.	Grammes in 1,000 Metres.	Grains in 1,000,000 Cubic Feet.	Grammes in 1,000 Metres.	Grains in 1,000,000 Cubic Feet.	Grammes in 1,000 Metres.	Grains in 1,000,000 Cubic Feet.	Grammes in 1,000 Metres.	
Nov. 9 to 11	Fine. W. wind	12·60	·028854	None.		12·60	·028854	25·00	·05725	116·90	·267701	146·90	·336401	1 to 11·60
Nov. 12 to 14	„ N. wind	15·17	·034739	None.		15·17	·034739	42·43	·097165	60·34	·138178	102·77	·235363	1 to 6·77
Nov. 4 to 7	NW. and W. wind; rain; snow.	Trace	—	None.		Trace	—	68·58	·157048	203·22	·265374	271·80	·622422	—

Air.—Water Aspirator.—Air drawn through Cotton Wool free from Acids.

		Cotton Wool.						Cotton Wool.						
Nov. 19 to 25	Fine. N.E. and S.E. wind.	None	None	None	None	None	None	15·317	·035076	153·17	·350759	168·487	·385835	—
Nov. 26 to Dec. 17.	Fine most of the time. N.W. and S.W. wind	17·525	·040132	1·168	·002675	18·693	·042807	60·851	·139349	162·27	·351598	223·12	·510945	1 to 11·93

The amount obtained by the aspiration method is far less than that obtained by the flask, and both must be wrong quantitatively, although the exact quantity is much less important for us than the comparative amount.

In order to find how much was taken up by the tubes, and how much by the sides of the vessels, the following experiments were tried. (See page 59.)

The amounts here agree very well with those obtained by drawing the air through liquids.

A couple of experiments were also tried to find if the chlorides were found in a solid or liquid state in the air. Cotton wool previously purified and tried was put into the tube, and the amount taken up was afterwards examined. (See page 59.)

It will be seen that the empty bottle and tubes retain the whole of the hydrochloric acid, the cotton wool nearly all, and that the amounts in each case agree very closely.

In like manner it will be seen that the amount of sulphuric acid retained by the empty bottle, and the amount retained by the cotton wool also, are nearly the same.

The amounts of chlorides and sulphates retained in either case are the same.

Perhaps I ought to have been satisfied with the results obtained by this method as indicating absolute amounts, but I prefer to wait a little, and to speak at present only of comparative amounts.

I may say, then, that after all the work which has been expended on these experiments, the exact amount of the substances mentioned as being in a measured volume of air has not been obtained. The experiments, however, are almost as valuable as if the volume had been exact. We want to know chiefly the relative quantity. With the rain there is no difficulty. There the exact amounts are found. However, having done this work, I shall try other methods. There is work enough for a long time to come. There must be a little mechanical aid to mix the gases; the ordinary plans of chemists have failed; the air must be washed with great violence to remove solid matter.

It was my intention to finish this report with a chapter on the laws regarding impurities of air in Prussia—or rather an account of the modes of procedure when complaints are made—as a companion to my report last year on the French and Belgian methods. It has not, however, been possible for me to obtain the necessary material in time.

I am, &c.

R. Angus Smith.

APPENDIX.

PAPERS REFERRED TO ON PAGE 35.

Some Facts relating to Rain Water, by M. Robinet (Comptes Rend. 1863, p. 493).—Rain Water collected at Paris between March 1st 1862 and September 1863.

1. The agitation of the air seemed to have no influence on the amount of fixed substances dissolved in the rain.

2. Day and night were also without influence.

3. If portions of a shower are collected one after the other, or if several showers of the same day are tried, it is found that the amount of fixed matter goes on diminishing.

4. The Paris rain water contains principally sulphate of lime and an organic substance little known. The amount of sulphate of lime may rise as high as 20 grains per cubic metre.

5. When mixed with nitrate of silver the Paris rain water becomes of a red colour of various tints, and then forms a deposit of a garnet colour. The garnet-coloured substance contains silver. The nature of this body is not known.

Researches into the Chemical Composition of Rain Water collected at different Altitudes, by Ad. Bobierre. Comptes Rend. 1864, p. 755.

In 1863 I evaporated in an oil bath 372 litres of rain water having carbonate of soda present, and determined month by month the amount of nitrogen in the fixed organic matter, the nitric acid, and the chlorine; then by fractional distillation, by Boussingault's method, I determined the amount of ammoniacal nitrogen.

Suspended matter was separated by filtration and examined by a microscope. I extract from my Memoir some of the principal figures, which show the nature of the results (at 47 metres height and down below).

Grammes of Ammonia, Nitric Acid, and Chloride of Sodium in a Cubic Metre of Rain Water collected at Nantes in 1863.

Month.	Ammonia.		Nitric Acid.		Chloride of Sodium (common salt).	
	154 feet high.	Below.	154 feet high.	Below.	154 feet high.	Below.
January	5·225	6·398	5·790	3·200	14·10	8·40
February	4·610	5·900	„	„	15·10	10·00
March	1·880	8·620	7·115	5·980	16·10	11·90
April	1·840	6·680	2·309	1·813	7·30	9·20
May	0·747	4·642	3·501	1·998	5·00	9·40
June	2·222	3·970	13·218	10·237	15·00	17·40
July	0·272	2·700	„	„	„	„
August	0·257	2·112	15·520	16·000	14·80	19·30
September	1·432	5·512	9·999	5·720	11·20	14·80
October	1·688	4·289	4·989	3·198	12·00	9·00
November	0·593	4·480	6·278	5·574	22·80	26·10
December	3·178	15·665	4·890	3·100	21·60	16·30
Mean	1·997	5·939	7·360	5·682	14·09	13·80

The following conclusions were drawn:—

1. The composition of the rain of large towns is very variable.

2. The variations observed, and which result from the purification of the air by washing, are particularly remarkable, so far as ammonia, nitric acid, and oxygen are concerned.

3. The examination of rain water leaves no doubt as to the relation of the different substances.

4. In the rain water collected at Nantes in 1863, at 47 metres high, the amount of ammonia is 1·997 grammes in a cubic metre. In the lower and unhealthy parts it is 5·939.

5. The amount of nitric acid increases as the amount of ammonia diminishes. The cubic metre of rain contains 7·36 in the upper and 5·682 in the lower parts of the town.

6. The composition of 372 litres at Nantes shows that the variation in organic matter and alkaline chlorides is more marked than that of other substances. The cubic metre gave in this place 13·90 as the amount of chlorides expressed as common salt.

SPEED OF AIR IN FLUES.—By Alfred E. Fletcher, F.C.S.

Dear Sir,

In the report for 1866 was given a description of the anemometer I had contrived for measuring the speed of air in chimneys, fire-flues, or other air passages containing acid vapours, soot, or corrosive gases. The older mechanical anemometers could not be used in these places.

Not able at the time to give a mathematical interpretation of the working of the instrument, I rested on experiment and drew up an empirical table of the speed indicated by it. Always dissatisfied with this, I have striven to construct mathematical formulæ by which to calculate the speed of the air from the indications of the instrument without depending on experiments which at best must be wanting in absolute accuracy.

The problem to be solved is one which does not seem to have received the attention of mathematicians. It may be briefly stated thus:—

The lower end of a vertical straight tube, open at both ends, dips into a liquid. To what height will the liquid be raised in the tube by the action of a current of air passing with a given velocity across its upper end?

On consideration it will appear probable that the height of the column is but a measure of the impact force of the air in motion; experiment proves this to be the case: it shows that the liquid is drawn up to the same height it would have reached had the stream of air been directed against the surface of the liquid in the cistern. The problem is now exchanged for one easier of solution.

Let v = velocity of the air in feet per second.

g = gravity = 32·18 feet per second.

w = weight of a cubic foot of air at 60° Fahr. and 29·92 inches barometric pressure = 0·076107 lbs.

P = pressure in lbs. per square foot of a flat surface held at right angles to the direction of the current of air.

Then $v^2\, w = g\, P$.

Let p = the height of the column of liquid driven up the tube, measured in inches.

W = weight in lbs. of $\frac{1}{12}$ cubic foot of this liquid.

Then $P = p\, W$; $v^2\, w = g\, p\, W$; $v = \sqrt{p\, \frac{g\, W}{w}}$

Where the liquid used is water $W = 5{\cdot}20833$, and $v = \sqrt{p} \cdot 46{\cdot}92$,

$$\text{or } p = \frac{v^2}{2202}$$

In the anemometer here described ether of the specific gravity ·740 is employed, and the instrument is so used that the reading is double the actual column of ether supported.

In this case $v = \sqrt{\frac{p}{2}\, \frac{g\, W}{w}} = \sqrt{p} \cdot 28{\cdot}55.$

In order now to see what correction will be necessary when the temperature of the stream of air is different from that of 60° Fahr.,

let v' = velocity of air at some other temperature, say at the temperature of t degrees Fahr.

w' = weight of a cubic foot of air at that temperature.

vol.′ = volume of a cubic foot of air at that temperature.

$$\text{Then } \frac{w}{w'} = \frac{\text{vol.}}{\text{vol.}} = \frac{\text{vol. at } 32^\circ \left(1 + \frac{t-32}{491}\right)}{\text{vol. at } 32^\circ \left(1 + \frac{60-32}{491}\right)} = \frac{459 + t}{519}$$

$$\text{or } \frac{1}{w'} = \frac{1}{w} \frac{459 + t}{519}$$

$$\text{but } v = \sqrt{\frac{p}{2} \frac{g\,W}{w}} \text{ or } v' = \sqrt{\frac{p}{2} \frac{g\,W}{w'}} = \sqrt{\frac{g\,p\,W}{2} \frac{1}{w} \frac{459+t}{519}}$$

$$= \sqrt{p \frac{459+t}{519}} \times 28{\cdot}55$$

But it is generally necessary to carry the correction a step further, and to give the velocity in feet of air at 60° temperature.

$$\text{Now } v = v' \frac{\text{vol.}}{\text{vol.}'} = v' \frac{519}{457 + t}$$

$$= \sqrt{\frac{g\,p\,W}{2} \frac{1}{w} \frac{459 + t}{519}} \times \frac{519}{459 + t} = \sqrt{\frac{g\,p\,W}{2} \frac{1}{w} \frac{519}{459 + t}}$$

$$= \sqrt{p \frac{519}{459 + t}} \times 28{\cdot}55.$$

Further, to correct for variations in barometric pressure,

let v'' = velocity of air at some other pressure than 29·92 inches, say at a pressure of h inches.

w'' = weight of a cubic foot of air at that pressure.

vol.″ = volume of a cubic foot of air at that pressure.

$$\text{Then } \frac{w}{w''} = \frac{29{\cdot}92}{h} \text{ ; or } \frac{1}{w''} = \frac{1}{w} \frac{29{\cdot}92.}{h}$$

$$\text{As above } v'' = \sqrt{\frac{p}{2} \frac{g\,W}{w''}} = \sqrt{\frac{p}{2} \frac{g\,W}{w} \frac{29{\cdot}92}{h}}$$

$$= \sqrt{p \frac{29{\cdot}92}{h}} \; 28{\cdot}55.$$

In cases where it is necessary to give the velocity in feet of air at a pressure of 29·92 inches:

$$\frac{v}{v''} = \frac{h}{29{\cdot}92} \qquad v = v'' \frac{h}{29{\cdot}92}$$

$$= \sqrt{p \frac{h}{29{\cdot}92}} \times 28{\cdot}55$$

The complete formula, embodying the formulæ of correction for variations of temperature, and also of barometric pressure, would therefore be—

$$v = \sqrt{p \frac{h}{29{\cdot}92} \cdot \frac{519}{459 + t}} \times 28{\cdot}55$$

v being the velocity of air at a temperature of t degrees F., under a pressure of h inches of mercury; but the velocity is measured in feet per second of air at the normal temperature and pressure.

When drawing a sample of air from a chimney in order to examine it, that sample is measured, by the aspirator employed, under the existing barometric pressure; we want, therefore, the velocity to be given in feet of air under the same condition. The following is the formula then to be used—

$$v = \sqrt{p \frac{29{\cdot}92}{h} \cdot \frac{519}{459 + t}} \times 28{\cdot}55$$

The number 28·55 thus obtained by calculation differs somewhat from the number obtained by the experiments which were made two years ago. These were not carried out with the accuracy that might now be attained by help of the experience which has been gained in the use of the instrument since that time; therefore I have repeated them.

The same method was adopted as formerly. A regular current of air was established in a long flue or air channel, one end of which was in connexion with a high chimney, the other end was open. The speed of this current was measured by the anemometer, and at the same time measured by noting the time a puff of smoke took in travelling from one end of the flue to the other. These experiments were made in three separate flues, and many experiments were made in each.

The value of C is found in each case from the formula—

$$c = \sqrt{\frac{v^2}{p} \cdot \frac{29{\cdot}92}{h} \cdot \frac{459 + t}{519}}$$

No. of Experiment.	Distance. Feet.	Time occupied by Smoke. Seconds.	Speed of Smoke. Feet per Second.	Pressure shown by Anemometer. Inches.	Temperature of Air in the Flue. Degrees Fahr.	Barometer Pressure. Inches.	Value of c.
1	55	9	6·111	0·045	54	30·10	28·56
2	117	12·3	9·513	0·1055	50	30·10	28·92
3	94	13·5	6·963	0·0575	55	29·65	29·02
4	94	16·5	5·757	0·038	55	29·65	29·21
5	145	8	18·12	0.4195	44	30·30	27·38
6	145	16	9·06	0·101	44	30·30	27·90
						Average	28·50

The average value of c in the experiments is 28·50, while the value arrived at by purely mathematical considerations is 28·55. This close correspondence is the more satisfactory when the difficulty of accurately measuring short intervals of time is borne in mind.

I have, therefore, adopted the formula $v = \sqrt{p} \times 28{\cdot}55$ as correct, and calculated from it a table showing the velocities which correspond to the various readings of the anemometer. The table is annexed; also a table showing the correction to be made for variations in the temperature of the air whose speed is to be measured. The corrections to be made for small variations in barometric pressure are unimportant. When it is necessary to make the correction recourse must be had to the formula—

$$v'' = \sqrt{p \frac{29{\cdot}92}{h}} \times 28{\cdot}55 \quad \text{or} \quad v = \sqrt{p \frac{h}{29{\cdot}92}} \times 28{\cdot}55$$

according to the circumstances of the case. In the former the velocity is given in feet per second of air measured under the barometric pressure existing in the air channel; in the latter it is given in feet per second of air measured under a pressure of 29·92 inches of mercury.

It may be asked if allowance should be made for the expansion or contraction which will take place in the ether of the manometer when exposed to varying temperatures. The variations of temperature to which the manometer itself is exposed are not great, being those of the external atmosphere only. It will be found that for a variation of 10 degrees the error introduced is about one per cent. Thus, if the manometer has been exposed to a temperature of 50°, and the speed of the air experimented on has been calculated at 10 feet per second, the real speed will be 10·1 feet. If the temperature of the ether in the manometer was 70°, then the real speed in place of 10 feet will be 9·9 feet per second.

In order to test by experiment the correctness of the formula for making allowance for variations in the temperature of the air whose velocity is to be measured, the following trial was made. In a furnace constructed for an experimental purpose a current of air entered through a pipe 9 inches diameter at a temperature of 170°; after traversing channels of red-hot brickwork it passed out through a 6-inch pipe at a temperature of 560°.

The reading of the anemometer at the inlet flue was 0·012 inch. Referring to the table, the speed given is 3·127 feet per second. The correcting figure for the temperature 170° is 0·9083. Multiplying the two together, we have 2·84 feet per second as the speed of the air measured at 60°. The quantity of air passing was, therefore, 1·255 cubic feet per second.

At the outlet pipe the anemometer reading was 0·102 inch, showing by the table a speed of 9·118 feet per second, to be multiplied by 0·7137, the figure of correction for the temperature 560°. This gives 6·508 feet per second for the speed of air measured at 60°; therefore the quantity of air passing was 1·278 cubic feet per second. The error is less than two per cent. Such an approximation is perhaps as close as could be expected in measurements of this kind, and may, it is thought, be taken as a confirmation of the general correctness of the formulæ.

As the instrument may come into the hands of those who are not familiar with the principles on which it is constructed it may be well to give plain directions for its use. It consists, firstly, of two tubes; secondly, of a manometer. The tubes are open throughout; the end of one is plain and straight, the end of the other is bent short round at a right angle. They may be of any length and of any size in the bore. These, by passing through a small hole made in the brickwork of the flue or chimney, are placed so that their ends are exposed to the current of air whose velocity is to be measured. The speed of a column of air moving along a circular flue or chimney is greater at the centre than at the outside. The point of average speed will be found to be removed from the outside by one-third of the radius of the flue. Thus, if the flue or chimney is 6 feet diameter at the place where the testing hole is made, the length of the portion of each tube passed through the hole should be either 1 foot or 5 feet. The tubes are made to lie parallel to each other and at right angles to the current of air, the bent end of the one being turned to face it. Care must be taken to prevent a rush of air entering at the test hole, and making an eddy in the flue. The outer ends of the tubes are connected by flexible tubing of any convenient length with the manometer. This measures the difference of the pressures conveyed

by the two tubes. The manometer may be considered as a U tube, whose limbs are expanded into cylinders of 3 inches diameter and 3 inches height.

The connecting tube at bottom is small. The liquid used in it is ether on account of its low specific gravity and its mobility. To assist in noting accurately the height of the ether, each column is provided with a float of hollow metal, on which is inscribed a fine line. An ivory scale, with 20 divisions to the inch and a vernier, enable the difference of level between the two floats to be read off to one-thousandth of an inch. In using the instrument it is not necessary to fix it strictly level if the following method is adopted.

Attach the straight pressure tube by means of flexible tubing to one limb of the instrument, and the bent pressure tube to the other limb. Adjust the scales to their respective floats and read off. Now reverse the connexions of the flexible tubing so that the pressure-tube with the straight end is attached to that limb of the instrument which was before connected with the bent tube, and the one with the bent end is attached to the other limb. Again adjust the scales to their respective floats and read off. Subtract the lesser reading from the greater, and the difference will be what is called in the annexed table "the manometer reading;" it is twice the height of the column of ether which was supported by the difference of pressure conveyed through the two tubes whose ends are in the current of air. If the current of air has been produced by increase of pressure, as by the blast from a fan, or by diminution of pressure as by the action of a chimney, the order of observation is the same. In both cases the amount of the lesser reading is deducted from that of the greater, and the difference is the figure sought. It is p in the formula $v = \sqrt{p} \cdot 28{\cdot}55$. On consulting the annexed table the corresponding speed of the air will be found.

Thus, if the first reading is 1·039, and the second reading, after reversing the connexions of the flexible tubing, is 0·861, the difference will be 0·178. The speed will be found on referring to the table to be 12·05 feet per second. This is, however, only true if the temperature of the air is 60° Fahr. Should it in this case be 520°, the table of corrections for temperature gives the number 0·7280. This multiplied by 12·05 is 8·772, the true speed.

TABLE to show the SPEED of CURRENTS of AIR as indicated by the ETHER ANEMOMETER.

$$v = \sqrt{p} \times 28{\cdot}55.$$

Temperature 60° Faht. Barometer 29·92 inches.

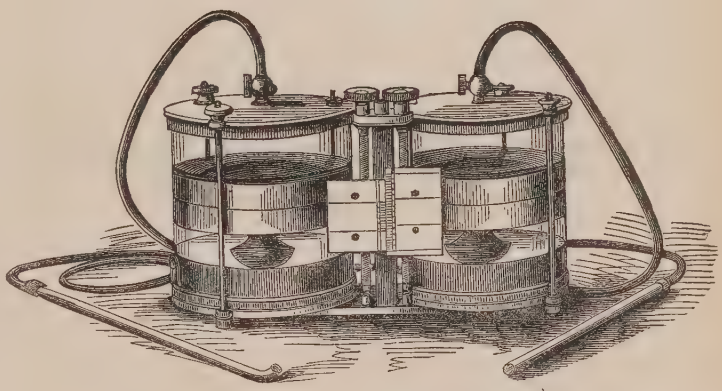
Manometer Reading: Inches.	Speed of Air: Feet per Second.	Manometer Reading: Inches.	Speed of Air: Feet per Second.	Manometer Reading: Inches.	Speed of Air: Feet per Second.
0·001	0·903	0·057	6·816	0·126	10·13
0·002	1·277	0·058	6·876	0·128	10·21
0·003	1·564	0·059	6·935	0·130	10·29
0·004	1·806	0·060	6·993	0·132	10·37
0·005	2·019	0·061	7·051	0·134	10·45
0·006	2·212	0·062	7·109	0·136	10·53
0·007	2·389	0·063	7·166	0·138	10·60
0·008	2·554	0·064	7·223	0·140	10·68
0·009	2·709	0·065	7·279	0·142	10·76
0·010	2·855	0·066	7·335	0·144	10·83
0·011	2·994	0·067	7·390	0·146	10·91
0·012	3·127	0·068	7·445	0·148	10·98
0·013	3·255	0·069	7·500	0·150	11·06
0·014	3·378	0·070	7·554	0·152	11·13
0·015	3·497	0·071	7·608	0·154	11·20
0·016	3·612	0·072	7·661	0·156	11·27
0·017	3·723	0·073	7·713	0·158	11·34
0·018	3·830	0·074	7·766	0·160	11·42
0·019	3·935	0·075	7·819	0·162	11·49
0·020	4·038	0·076	7·871	0·164	11·56
0·021	4·137	0·077	7·922	0·166	11·63
0·022	4·235	0·078	7·974	0·168	11·70
0·023	4·330	0·079	8·025	0·170	11·77
0·024	4·423	0·080	8·075	0·172	11·84
0·025	4·514	0·081	8·125	0·174	11·91
0·026	4·604	0·082	8·175	0·176	11·98
0·027	4·691	0·083	8·225	0·178	12·05
0·028	4·777	0·084	8·275	0·180	12·11
0·029	4·862	0·085	8·324	0·182	12·18
0·030	4·945	0·086	8·373	0·184	12·25
0·031	5·027	0·087	8·421	0·186	12·31
0·032	5·107	0·088	8·469	0·188	12·38
0·033	5·187	0·089	8·517	0·190	12·45
0·034	5·265	0·090	8·565	0·192	12·51
0·035	5·342	0·091	8·613	0·194	12·57
0·036	5·418	0·092	8·660	0·196	12·64
0·037	5·492	0·093	8·707	0·198	12·71
0·038	5·565	0·094	8·754	0·200	12·77
0·039	5·638	0·095	8·800	0·202	12·83
0·040	5·710	0·096	8·846	0·204	12·90
0·041	5·781	0·097	8·892	0·206	12·96
0·042	5·851	0·098	8·938	0·208	13·02
0·043	5·921	0·099	8·983	0·210	13·08
0·044	5·989	0·100	9·028	0·212	13·15
0·045	6·056	0·102	9·118	0·214	13·21
0·046	6·123	0·104	9·207	0·216	13·27
0·047	6·189	0·106	9·295	0·218	13·33
0·048	6·255	0·108	9·383	0·220	13·39
0·049	6·320	0·110	9·469	0·222	13·45
0·050	6·384	0·112	9·554	0·224	13·51
0·051	6·448	0·114	9·639	0·226	13·57
0·052	6·510	0·116	9·724	0·228	13·63
0·053	6·572	0·118	9·808	0·230	13·70
0·054	6·634	0·120	9·891	0·232	13·76
0·055	6·695	0·122	9·972	0·234	13·82
0·056	6·756	0·124	10·053	0·236	13·88

Manometer Reading: Inches.	Speed of Air: Feet per Second.	Manometer Reading: Inches.	Speed of Air: Feet per Second.	Manometer Reading: Inches.	Speed of Air: Feet per Second.
0·238	13·94	0·346	16·80	0·454	19·24
0·240	13·99	0·348	16·85	0·456	19·28
0·242	14·05	0·350	16·89	0·458	19·32
0·244	14·11	0·352	16·94	0·460	19·36
0·246	14·17	0·354	16·99	0·462	19·41
0·248	14·23	0·356	17·04	0·464	19·45
0·250	14·28	0·358	17·09	0·466	19·49
0·252	14·34	0·360	17·13	0·468	19·53
0·254	14·40	0·362	17·18	0·470	19·57
0·256	14·45	0·364	17·23	0·472	19·62
0·258	14·50	0·366	17·28	0·474	19·66
0·260	14·56	0·368	17·33	0·476	19·70
0·262	14·62	0·370	17·37	0·478	19·74
0·264	14·68	0·372	17·42	0·480	19·78
0·266	14·74	0·374	17·47	0·482	19·82
0·268	14·79	0·376	17·52	0·484	19·86
0·270	14·84	0·378	17·56	0·486	19·90
0·272	14·90	0·380	17·60	0·488	19·94
0·274	14·96	0·382	17·65	0·490	19·98
0·276	15·01	0·384	17·70	0·492	20·02
0·278	15·06	0·386	17·75	0·494	20·06
0·280	15·11	0·388	17·79	0·496	20·10
0·282	15·17	0·390	17·83	0·498	20·14
0·284	15·23	0·392	17·88	0·500	20·18
0·286	15·28	0·394	17·93	0·510	20·38
0·288	15·33	0·396	17·98	0·520	20·58
0·290	15·38	0·398	18·02	0·530	20·78
0·292	15·44	0·400	18·06	0·540	20·98
0·294	15·49	0·402	18·11	0·550	21·17
0·296	15·54	0·404	18·16	0·560	21·37
0·298	15·59	0·406	18·20	0·570	21·56
0·300	15·64	0·408	18·24	0·580	21·75
0·302	15·70	0·410	18·28	0·590	21·94
0·304	15·75	0·412	18·33	0·600	22·12
0·306	15·80	0·414	18·38	0·610	22·30
0·308	15·85	0·416	18·42	0·620	22·48
0·310	15·90	0·418	18·46	0·630	22·66
0·312	15·95	0·420	18·50	0·640	22·84
0·314	16·00	0·422	18·55	0·650	23·02
0·316	16·05	0·424	18·60	0·660	23·20
0·318	16·10	0·426	18·64	0·670	23·38
0·320	16·15	0·428	18·68	0·680	23·55
0·322	16·20	0·430	18·72	0·690	23·72
0·324	16·25	0·432	18·77	0·700	23·89
0·326	16·30	0·434	18·82	0·750	24·73
0·328	16·35	0·436	18·86	0·800	25·54
0·330	16·40	0·438	18·90	0·850	26·32
0·332	16·45	0·440	18·94	0·900	27·08
0·334	16·50	0·442	18·99	0·950	27·83
0·336	16·55	0·444	19·03	1·000	28·55
0·338	16·60	0·446	19·07	1·250	31·93
0·340	16·65	0·448	19·11	1·500	34·97
0·342	16·70	0·450	19·15	1·750	37·77
0·344	16·75	0·452	19·20	2·000	40·37

TABLE of the VALUES of $\sqrt{\frac{519}{459+t}}$ for VALUES of t from 0 to 1,000; or CORRECTIONS for TEMPERATURE.

t Degrees Fahrenheit.	$\sqrt{\frac{519}{459+t}}$	t Degrees Fahrenheit.	$\sqrt{\frac{519}{459+t}}$	t Degrees Fahrenheit.	$\sqrt{\frac{519}{459+t}}$
0	1·0634	280	0·8380	560	0·7137
5	1·0577	285	0·8352	565	0·7119
10	1·0520	290	0·8324	570	0·7102
15	1·0464	295	0·8296	575	0·7085
20	1·0409	300	0·8269	580	0·7068
25	1·0355	305	0·8242	585	0·7051
30	1·0302	310	0·8215	590	0·7034
35	1·0250	315	0·8189	595	0·7017
40	1·0198	320	0·8163	600	0·7000
45	1·0148	325	0·8137	605	0·6983
50	1·0098	330	0·8111	610	0·6967
55	1·0049	335	0·8085	615	0·6951
60	1·0000	340	0·8060	620	0·6935
65	0·9952	345	0·8035	625	0·6919
70	0·9905	350	0·8010	630	0·6903
75	0·9858	355	0·7985	635	0·6887
80	0·9812	360	0·7960	640	0·6871
85	0·9767	365	0·7936	645	0·6856
90	0·9723	370	0·7912	650	0·6841
95	0·9679	375	0·7888	655	0·6826
100	0·9636	380	0·7865	660	0·6811
105	0·9593	385	0·7842	665	0·6796
110	0·9551	390	0·7819	670	0·6781
115	0·9509	395	0·7786	675	0·6766
120	0·9468	400	0·7763	680	0·6751
125	0·9428	405	0·7741	685	0·6736
130	0·9388	410	0·7729	690	0·6721
135	0·9348	415	0·7707	695	0·6706
140	0·9309	420	0·7685	700	0·6691
145	0·9270	425	0·7663	705	0·6676
150	0·9232	430	0·7641	710	0·6662
155	0·9194	435	0·7619	715	0·6648
160	0·9156	440	0·7598	720	0·6634
165	0·9119	445	0·7577	725	0·6620
170	0·9083	450	0·7556	730	0·6606
175	0·9047	455	0·7535	735	0·6592
180	0·9012	460	0·7514	740	0·6578
185	0·8977	465	0·7494	745	0·6565
190	0·8943	470	0·7474	750	0·6552
195	0·8909	475	0·7454	755	0·6538
200	0·8875	480	0·7434	760	0·6524
205	0·8841	485	0·7414	765	0·6511
210	0·8808	490	0·7394	770	0·6498
215	0·8775	495	0·7375	775	0·6485
220	0·8743	500	0·7356	780	0·6472
225	0·8711	505	0·7337	785	0·6459
230	0·8680	510	0·7318	790	0·6446
235	0·8649	515	0·7299	795	0·6433
240	0·8618	520	0·7280	800	0·6420
245	0·8587	525	0·7261	805	0·6407
250	0·8557	530	0·7243	810	0·6395
255	0·8527	535	0·7225	815	0·6382
260	0·8497	540	0·7207	820	0·6369
265	0·8467	545	0·7189	825	0·6357
270	0·8438	550	0·7171	830	0·6345
275	0·8409	555	0·7153	835	0·6333

t Degrees Fahrenheit.	$\sqrt{\frac{519}{459+t}}$	t Degrees Fahrenheit.	$\sqrt{\frac{519}{459+t}}$	t Degrees Fahrenheit.	$\sqrt{\frac{519}{459+t}}$
840	0·6321	895	0·6192	950	0·6070
845	0·6309	900	0·6181	955	0·6059
850	0·6297	905	0·6169	960	0·6048
855	0·6285	910	0·6158	965	0·6037
860	0·6273	915	0·6147	970	0·6026
865	0·6261	920	0·6136	975	0·6015
870	0·6249	925	0·6125	980	0·6004
875	0·6237	930	0·6114	985	0·5994
880	0·6225	935	0·6103	990	0·5984
885	0·6214	940	0·6092	995	0·5974
890	0·6203	945	0·6081	1000	0·5964



MR. FLETCHER'S ANEMOMETER.

LONDON:
Printed by GEORGE E. EYRE and WILLIAM SPOTTISWOODE,
Printers to the Queen's most Excellent Majesty.
For Her Majesty's Stationery Office.

ALKALI ACT, 1863.

FIFTH ANNUAL REPORT

BY

THE INSPECTOR

OF HIS

PROCEEDINGS DURING THE YEAR 186

(*Presented to both Houses of Parliament pursuant to Act* 26 & 27 *Vict. Cap.* 124.)

LONDON:
PRINTED BY GEORGE E. EYRE AND WILLIAM SPOTTISWOODE
PRINTERS TO THE QUEEN'S MOST EXCELLENT MAJESTY.
FOR HER MAJESTY'S STATIONERY OFFICE.

1869.

REPORTS

OF THE

INSPECTORS OF FACTORIES

TO

Her Majesty's Principal Secretary of State for the Home Department,

FOR THE

HALF YEAR ENDING 30TH APRIL 1868.

Presented to both Houses of Parliament by Command of Her Majesty.

LONDON:

PRINTED BY GEORGE E. EYRE AND WILLIAM SPOTTISWOODE,

PRINTERS TO THE QUEEN'S MOST EXCELLENT MAJESTY.

FOR HER MAJESTY'S STATIONERY OFFICE.

1869.

Price 3d.]

REPORTS

OF THE

INSPECTORS OF FACTORIES

TO

HER MAJESTY'S PRINCIPAL SECRETARY OF STATE
FOR THE HOME DEPARTMENT

FOR THE

HALF YEAR ENDING 30TH APRIL 1868.

Presented to both Houses of Parliament by Command of Her Majesty.

LONDON:
PRINTED BY GEORGE E. EYRE AND WILLIAM SPOTTISWOODE,
PRINTERS TO THE QUEEN'S MOST EXCELLENT MAJESTY.
FOR HER MAJESTY'S STATIONERY OFFICE.

1869.

REPORTS

TO THE RIGHT HON. GATHORNE HARDY.

Her Majesty's Principal Secretary of State for the Home Department.

	Page
Joint Report of Inspectors for the half-year ending 30th April 1868 -	3
Report by Alexander Redgrave, Esq. ditto. ditto. - -	7
Report by Robert Baker, Esq. for the half-year ended 30th April 1868 - - -	34

Half-yearly Joint Report of the Inspectors of Factories.

Factory Inspector's Office,
10, *Whitehall,*
London, S.W., 3*rd Dec.* 1868.

Sir,

We beg to present our reports for the half-year ended the 30th April last.

Our attention was for some time directed to the reorganization of our respective Districts, and has been given uninterruptedly to the requirements of the Factory Act of 1867.

We have the honour to be,
Sir,
Your obedient servants,
Alex. Redgrave.
Robt. Baker.

The Right Hon.
The Secretary of State
for the Home Department,
&c. &c. &c.

Joint Appendix No. 1.

General Abstract, showing the Total Number of Accidents reported to the Inspectors of Factories during the Six Months ended the 30th April 1868.

Table No. I.—*Accidents arising from Machinery.*

Nature of Injury.	Adults.		Young Persons.		Children.		Total.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.&F.
Causing death	20	2	10	2	2	—	32	4	36
Amputation of right hand or arm	3	2	8	—	—	—	11	2	13
Amputation of left hand or arm	6	3	2	1	1	—	9	4	13
Amputation of part of right hand	38	24	36	47	13	6	87	77	164
Amputation of part of left hand	39	21	45	41	10	12	94	74	168
Amputation of any part of leg or foot	1	—	—	—	2	—	3	—	3
Fracture of limbs and bones of trunk	49	10	29	22	16	3	94	35	129
Fracture of hand or foot	40	37	36	34	20	15	96	86	182
Injuries to head and face	46	54	42	31	15	9	103	94	197
Lacerations, contusions, and other injuries, not enumerated above	368	258	356	326	145	74	869	658	1,527
Total	610	411	564	504	224	119	1,408	1,034	2,432

Table No. II.—*Accidents not arising from Machinery.*

Nature of Injury.	Adults.		Young Persons.		Children.		Total.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.&F.
Causing death	19	3	2	1	1	—	22	4	26
Amputation of right hand or arm	1	—	—	—	—	—	1	—	1
Amputation of left hand or arm	1	—	—	—	—	—	1	—	1
Amputation of part of right hand	4	—	1	—	—	—	5	—	5
Amputation of part of left hand	4	—	1	1	—	—	5	1	6
Amputation of any part of leg or foot	1	—	2	—	—	—	3	—	3
Fracture of limbs and bones of trunk	46	5	17	7	6	1	69	13	82
Fracture of hand or foot	11	—	2	1	1	—	14	1	15
Injuries to head and face	63	5	22	4	7	1	92	10	102
Lacerations, contusions, and other injuries, not enumerated above	376	22	169	25	35	2	580	49	629
Total	525	35	216	39	50	4	791	78	869
Total of the entire numbers reported to Mr. Baker; and of all those reported to Mr. Redgrave, "under the provisions of the Acts passed up to 1864," inclusive	1,135	446	1,780	543	274	123	2,189	1,112	3,301
Accidents reported to Mr. Redgrave "under the Act of 1867, both *by* machinery, and *not* by machinery"	965		148		1		1,114		
Total numbers reported	2,546		2,471		398		4,415		

Joint Appendix No. 2.

Summary of the Total Number of Informations and Convictions and the Amount of Penalties and Costs in the Districts of the Inspectors during the Six Months ended the 30th of April 1868.

Description of Offence.	Number of Informations.	Result.			Penalties imposed.							
		Convictions.	Withdrawn on Payment of Costs.	Dismissed.	5*s*.	10*s*.	20*s*.	40*s*.	50*s*.	£3.	£5.	£20.
Neglecting to fence mill gearing, whereby bodily injury was caused	1	1	—	—	—	—	—	—	—	—	—	1
Employing children and young persons without registering their names and date of first employment	5	4	1	—	—	—	—	3	—	1	—	—
Employing children and young persons without surgical certificates	13	8	4	1	—	—	—	4	2	2	—	—
Employing children before noon and after one o'clock p.m. of the same day	7	7	—	—	—	—	5	—	—	2	—	—
Employing children without school vouchers	10	4	5	1	—	—	4	—	—	—	—	—
Employing children, young persons, and females at night	4	2	2	—	—	—	—	2	—	—	—	—
Employing children, young persons, and women after six o'clock p.m.	37	19	18	—	—	—	12	1	—	6	—	—
Employing young persons and women after two o'clock on Saturday	2	—	2	—	—	—	—	—	—	—	—	—
Employing young persons and women during meal hours	101	51	50	—	—	—	51	—	—	—	—	—
Parents employing or conniving at the illegal employment of their children	9	7	2	—	4	1	2	—	—	—	—	—
Parents neglecting to cause their children to attend school	3	3	—	—	2	—	1	—	—	—	—	—
Neglecting to give notice of accident to the certifying surgeon	1	1	—	—	—	—	—	—	—	1	—	—
Not keeping an alphabetical index of young persons	2	1	—	1	—	—	—	—	—	1	—	—
Carried forward	195	108	84	3	6	1	75	10	2	13	—	1

Joint Appendix No. 2—*continued.*

Description of Offence.	Number of Informations.	Result.			Penalties imposed.							
		Convictions.	Withdrawn on Payment of Costs.	Dismissed.	5*s*.	10*s*.	20*s*.	40*s*.	50*s*.	£3.	£5.	£20.
Brought forward -	195	108	84	3	6	1	75	10	2	13	—	1
Making false entries in the register of young persons - - -	1	1	—	—	—	—	—	—	—	—	—	1
Wilful obstruction of the sub-inspector in the execution of his office -	5	2	3	—	—	—	—	—	—	1	1	—
Total - -	201	111	87	3	6	1	75	10	2	14	1	2

The total amount of fines inflicted, £190.
The total amount of costs, £92 9*s*. 6*d*.

REPORT of ALEXANDER REDGRAVE, Esq., Inspector of Factories, for the Half-year ended 30th April 1868.

Factory Inspector's Office, 10, *Whitehall*,
SIR, 30*th June* 1868.

The administration of the Factory Acts Extension Act, 1867, has been the principal work of my district during the half-year embraced by this Report.

This Act came into operation on the 1st of January, but having been passed on the 15th August 1867, I felt it most important to advance every detail as much as possible.

The first step I took was to send copies of the Act itself to all the principal employers of labour whose establishments would come within its provisions, and to beg their attention to the subject.

As the abstracts of the Act could not be circulated until I had obtained pretty accurate lists of the various works in my district, and until I had selected certifying surgeons in localities for which none had been appointed, I was anxious to commence early in disseminating information, and in preparing the manufacturers for the coming into operation of the new Act.

Wherever it was desired, I attended meetings either of Chambers of Commerce, of associations, or of other public bodies, to explain the provisions of the new Act and the bearings of the Factory Regulations; to ascertain the particular customs of the various trades; to see in what way the regulations would interfere with them; and to advise generally how the Act could be introduced without any rough or unnecessary disturbance of the existing arrangements between master and operative. Upon these, as upon all other occasions, I have desired to make it clearly understood that while I and my staff are by our office and our feelings unflinching advocates of the full and proper attributes of the working classes, and notably of the women, young persons, and children, we are no less impartial in our consideration of the rights of employers; that in administering the Acts of Parliament committed to our charge we look to the fulfilment of the objects of those Acts of Parliament—the prevention of excessive labour, the improvement of the physical condition of the operatives, and the promotion of the education of the young—by means of the cordial co-operation of the employers; that we consider it is our duty, as it is our earnest wish, to assist them in overcoming what-

ever difficulties stand in their way; and believing the Factory Acts to have been passed to attain a great good, without inflicting an injury upon any one or upon any class, we shall pursue our course relying upon the good feeling of the masters and of the operatives to assist in achieving the introduction of the new state of things without irritation or loss of mutual confidence and respect.

At all the meetings which I have attended I have been able, to the best of my belief, to show that the Act could be administered in a spirit of perfect fairness without causing any injury; and the merchants and manufacturers expressed their approbation of the spirit of factory legislation, and their confidence in us as the exponents and administrators of the law.

At meetings of operatives in Sheffield, held by Mr. Sub-Inspector Gould, to which I refer at p. 14, at which he had to explain to them the responsibilities attaching to their positions, votes of thanks and confidence were also passed.

Having, Sir, thus secured confidence in us and our impartiality, you will not be surprised that I have not to report a single prosecution under the new Acts, nor in fact under any Act, except the original Factory Act.*

It is not that we have never discovered instances in which something was done which should not have been done, but we have never discovered an omission purposely contrived, or an illegal act wilfully committed with a full knowledge of the law; we have never yet found ourselves opposed by an adversary, by one who was unwilling to be told he was wrong, or who has not (so far as our subsequent inquiry led us to believe) conformed to the law after an explanation; and I believe this is in a great degree a result of the pains taken to foster a feeling of reliance upon us, to which the tact, good temper, and discretion of the gentlemen on my staff have greatly contributed.

Concurrently with the above duties I had to consider the new arrangements for my district. A considerable responsibility of a double nature was imposed upon me, for I had in the first place to satisfy myself that the arrangements would secure the end in view, viz., provide a sufficiently frequent and careful inspection of the works themselves; and then to satisfy the Treasury that the increase of staff

---

* An information, which will be noticed in my next report, was laid against Messrs. Palmer and Co., of Jarrow, in order that a case might be taken to the Queen's Bench to decide whether an iron ship-building yard is under the Act.

which I considered necessary was fully warranted by the circumstances upon which I founded my opinion.

Having had many years' experience as an Inspector, I had always been of the opinion that a staff well employed and adequately remunerated would be more economical and more efficient than a larger staff of gentlemen, possibly not working so hard, and not so well paid.

In arranging my district consequent upon the passing of the Bleaching and Dyeing Works and the Lace Factories Acts, I kept that principle in view, of giving full employment to the staff, in the full persuasion that the Government would, upon finding the well-working of the system, improve the pay and allowances of the staff.

In the early and middle part of last year I made the best inquiries I could into the number and importance of the works which were embraced by the Act of 1867, so as to be prepared to submit at an early date my conclusions as to what increase of staff would be required for my district, and I was satisfied that the statements I received showed the minimum number of works under the new Act.

At the beginning of last year the average number of works to each Sub-Inspectorship in my district was 530; and, taking into consideration the class of works to be brought under inspection by the new Acts, I considered that, by the re-arrangement of Sub-Inspectorships and the consequent diminution of travelling in most of them, I could increase by at least 100 works the number to each officer, and I based my arrangements upon that calculation, and asked for an addition to my staff of six Sub-Inspectors. The enquiries which were made into the working of the department by your directions, induced you, instead of adding six Sub-Inspectors to my staff, to create a new office, that of Assistant Inspector, and to appoint to my staff one Assistant Inspector and five Sub-Inspectors. This arrangement is an excellent one, especially upon the introduction of an Act extending to almost every town over a vast area, where so much personal explanation is desired and, as far as experience has shown to this time, the arrangement has worked well. Mr. Walker, the gentleman whom you selected for my district, had been a Sub-Inspector since 1838, and possesses every qualification for the office, especially his thorough knowledge of the Acts of Parliament, his courteous address, and his active habits. He has taken great pains in explaining the new Acts in various parts of his district, and especially with those Sub-Inspectors, who have only been recently appointed, where his assistance has been most valuable.

The regulations, of which you were pleased to approve, place under Mr. Walker's superintendence the most northern Sub-Inspectorships of my district, over which he acts as Inspector, and of the state of which, besides his constant communications with me, he makes two regular reports a year, for the same periods as the reports of the Inspectors, his first report being embodied in this Report.

I have stated that the arrangements I contemplated would give an average of about 630 works to each Sub-Inspectorship; but after the fuller inquiry by personal inspections in the several sub-divisions, I found that my calculations were far under the mark, especially in the metropolis and some of the larger towns, where it was almost impossible, except by actual inquiry, to make an approximation. In the metropolis and its neighbourhood there are yet numbers of works which have hitherto escaped notice, and of which we have not yet been able to take cognizance, so that I am not even now prepared to state what is the actual number of works affected by the new Acts.

I have not obtained from the new works any statistics of the number of persons employed, or of the power of the steam engines, as I should not be able to show any totals, but only an approximate statement, which would be likely to mislead; I am, however, able to state that the number of half-timers under the new Act is remarkably small; in every instance in which older children could be obtained half-timers are not employed. It is, however, most probable that in July 1870, when the age of half-timers in the new works will be assimilated to the age as in factories under the old Acts, the number of half-timers will have considerably increased.

I annex, however, a return of all the works under inspection in my district as far as at present ascertained, and in a future report I hope be able to give a statement of the population of all these busy hives:

Under the Acts of 1833–1844 :—		
Cotton Factories - -	2,565	
Woollen „ - - -	1,519	
Worsted „ - - -	711	
Silk „ - - -	173	
Flax „ - - -	428	
	——	5,396
Under the Act of 1845 :—		
Print Works - - -		174
Under the Act of 1860 :—		
Bleaching and Dyeing Works,&c.		726
Carried forward - -		6,296

Brought forward		6,296
Under the Act of 1861 :—		
Lace Factories		264
Under the Act of 1864 :—		
Earthenware Works	604	
Lucifer Match „	67	
Paper Staining „	51	
Cartridge „	7	
Percussion Cap „		
Fustian Cutting „	183	
		912
Under the Act of 1867 :—		
Blast Furnaces	57	
Copper Mills	14	
Iron Mills	33	
Foundries	774	
Manufacture of Machinery and Metal	2,672	
India Rubber and Guttapercha	42	
Paper Mills	177	
Glass Works	106	
Tobacco Factories	318	
Letter-Press Printers and Bookbinders	2,313	
Works not enumerated, employing more than 50 hands	1,084	
		7,590
Total number of works		15,062

Instead therefore of an average of 530 works in each subdivision as in 1867, or of 630 as I had estimated, there is an average of 800, and I am not prepared to say that that number cannot be managed, although I am desirous of further experience before expressing my opinion decidedly.

I have to report the thorough and general observance of the law throughout the whole of my district, even in the many and minute details, which are undoubtedly obstacles in the way of very many of the smaller manufacturers. There is such a strong desire on the part of employers that their hands should be contented and justly dealt with, that no difficulty has been experienced on the part of the larger manufacturers; but it is difficult, to persuade a letter-press printer, for instance, who employs two or three apprentices of 14 or 15, that it is absolutely necessary that they should be examined by a certifying surgeon, for which he has to pay, to prove that they are above 11 or 12 years of age. I think, as we become better acquainted with the customs of the various smaller trades, that it will be found unnecessary to

insist upon the minute regulations of the Factory Acts, wherever, as in the case of apprentices, they cannot be of the slightest service to the persons employed; again, it is very important that the opinions of the masters and the operatives should be considered whether their trade requires, from the custom or habits of the people or from other causes, that the work should be arranged from 7 a.m. to 7 p.m., or from 8 a.m. to 8 p.m., which is desired by a very large class of hands who have never been accustomed to work so early as 6 a.m., and who have a strong feeling that they lose somewhat of caste by being compelled to commence work at so early an hour. There are many trades too in which it is not usual to work more than 54 or 55 hours per week, for instance, from 8 a.m. to 7 p.m. If they close at 6 p.m., but one hour earlier than before, they must commence not later than 6.30 a.m., because a breakfast half-hour must be given not earlier than 7.30. Such an arrangement is very much objected to in many trades, and it was to meet these very cases that power was given to the Secretary of State to grant the modifications for which provision is made in the schedule to the Act.

Mr. Walker, in his half-yearly report, which follows, Appendix No. 1., is equally satisfied with myself that the Act is doing great good, and bears testimony that its introduction is appreciated by all parties.

Among the towns in my district in which it was anticipated there would be more difficulty in administering the new Act than in any other, Sheffield stood prominent from various causes.

This town had strongly objected to the Report of the Childrens' Employment Commissioners and to the regulations of the Factory Act as unsuited to the industries of the locality. But the Act having passed extending the factory regulations, I am bound to say that had I not known of the previous existence of a feeling hostile to the Factory Acts, I should, upon my interviews with the Chamber of Commerce and other gentlemen in Sheffield, have believed that they had been supporters of the extension of legislation to their town.

There are great peculiarities in the town of Sheffield, which are not to be found to the same extent, I believe, in any other place. The employment of the younger hands is independent of the master manufacturer; there is a large system of contract work, sometimes on the premises of the master manufacturer, at others not on his premises, and it is the contractor or the men whom he hires and employs who engages

and pays the younger hands; for instance, the manufacturer may have a large establishment, he lets out power at so much per week to an operative, and provides him with suitable material, and pays the operative who brings his own tools for the articles produced.

The manufacturers have contended that their operatives are the real employers of the children; that they (the manufacturers) have no voice or authority over them; that the operatives are guided by their own rules and their own inclination as to whom or how many children they may employ. But in all the larger establishments the manufacturers have, with the greatest good feeling and personal courtesy to us, entered upon the administration of the Act upon their premises in a manner to secure a very satisfactory conclusion.

It was then with the contractors not upon the premises of the master manufacturers that we had next to deal. There are large factories in Sheffield divided into numerous separate rooms, power being "laid on" in each room, and an operative grinder hiring a grinding wheel or trough, and bringing his work to be done there. The grinder thus became, in the eye of the law, "the occupier of a factory," and responsible for the observance of all the various factory regulations in his factory; and as many of the grinders are rough, unlettered men, it would have been hopeless to expect from them any appreciation of or care for the system of registration and granting of certificates which is compulsory under the Factory Acts; but the trouble and expense of which being borne by the other manufacturers, it would have been manifestly unfair to excuse to a section of the trade; it became, therefore, necessary to decide upon some plan of meeting the difficulty.

The following will give some idea of the extent of the system, and the number of the grinders hiring wheels in public factories who have to be treated as occupiers of factories:—

The Union	wheel	with about	300	separate tenants.
Soho	„	„	100 to 150	„
Trafalgar	„	„	60 to 70	„
Beeswax	„	„	40 to 50	„
Beehive	„	„	30	„
Marsden's	„	„	50 to 60	„
Turner's	„	„	50 to 60	„
Bacon's	„	„	40	„
Bernard Lane	„	„	20	„

The only plan which suggested itself to Mr. Gould or myself was to endeavour to induce the whole of the tenants

of each factory or wheel, as the place is commonly called, to work together, and to authorize one person to act for the whole body; and I requested Mr. Gould to visit all the wheels in succession, and to propose such a plan to the grinders.

Mr. Gould accordingly visited all the above-named wheels, and having broached the subject to the grinders, has been very successful in carrying them with him, and in setting in motion an harmonious system of working by which we expect to be able to administer the details of the new Act fully in the spirit and sufficiently in the letter of the Act.

Mr. Gould thus describes his interview with the grinders:—

"In accordance with your wish, I beg to report briefly the "result of my endeavours to introduce 'The Factory Acts Ex- "tension Act, 1867,' among the grinding wheels of Sheffield. "In dealing with these establishments, which have each a "constantly changing population, varying in numbers from "10 to 300, I have all along acted on your suggestion that "it would be better to treat the tenants, as it were, 'en "bloc;' and thus, while each individual would be responsible "for any offence he might commit against the Factory Act, "the difficulties which the details of a new regime might "at first sight present would be, so to say, concentrated, as if "such individual formed part of a factory under one adminis- "tration; *i.e.*, instead of every hirer of a 'trough' being "compelled to keep a separate register of the young persons "and children in his employ, and to hang up a separate "meal notice and abstract, one register should be kept and "one set of notices should be considered sufficient for the "whole number of occupiers in any given wheel.

"The grinding wheels in Sheffield may be divided into "two classes; the first of which consist of such wheels as "are attached to the large cutlery manufactories, and whose "occupiers are all in the employ of one master. In such "cases the masters have generally a certain influence over "the tenants, which, if so disposed, they may turn to good "account in assisting to carry out the law.

"The second class is made up of establishments belong- "ing to persons unconnected with trade, which are the "receptacles of wild tribes answerable to no discipline and "subject to no control beyond that of the various trades "unions. It is with respect to these latter that your "idea of holding public gatherings of the tenants, in order "to explain to them the provisions of the Factory Act, has "been principally carried out.

"Before taking any steps in the matter my plan was, "with the assistance of the engine tenter or steward of any

" wheel, to arrange a day which would be likely to suit the " tenants. On my arrival at the appointed time the engine " would be stopped, and the grinders—sometimes, it is true, " unwillingly enough—would assemble in the yard round a " platform, improvised for the occasion, of a couple of grind- " stones. I was thus enabled to explain to them the new " restrictions to which they were subjected, and to suggest " to them the means you had sanctioned for smoothing their " path. After a little conversation, seasoned with a good " deal of 'chaff,' we generally got on good terms, and in " almost all instances the proposals I made were unanimously " accepted.

" Of course it is impossible to expect that the resolutions " carried nem. con. have been always strictly adhered to; " but I have every hope that with patience and the assis- " tance of the better class of grinders, which is generally " most cordially given, the provisions of the new Act will be " fairly observed in all the wheels. I may here mention that " at the Soho wheel, one of the largest, I have received the " greatest aid from a penknife grinder, Mr. Goodlad, who " is working heart and soul in the cause.

" The clause relating to fans is also appreciated by all " classes of grinders; the short term of life enjoyed by " those engaged in the razor, scissor, and fork grinding, " conducing greatly to this end."

The accidents are assuming very large proportions, and it will become a question for consideration whether some alteration may not be made in the law respecting the reporting of all accidents in factories, the majority of which have arisen from causes which no legislative enactments or human foresight could have prevented, and the reporting of which, at the expense of the Government, can lead to no good whatever. In my Report for the 31st October 1866 I analyzed the causes of the accidents which happened in the various works then under inspection. Out of a total of 1,833 accidents, a very large number were caused by the sheer carelessness of the operatives themselves. I pointed out how large a proportion were caused by the cleaning of machinery in motion, the picking of bits of waste from wheels, and the like, which no fencing would prevent; how many were caused by the injured persons playing with machinery, and how many were not caused by machinery

I propose now to examine the nature and causes of the accidents which have occurred in the new works brought under inspection by the Act of 1867. As the Act only came into operation on the 1st January 1868, very many accidents

happened of which no notice reached me, and it was not until some time after that date that the law was set in action in a large number of works. From that date to the 30th April last 1,114 accidents have been reported to me under the Act of 1867.

They occurred in the following establishments:—

In Blast furnaces	58
Iron mills	192
Manufactories of metal	282
Steel works	33
Foundries	163
Paper mills	39
Glass works	9
Printing establishments	30
Shipbuilding yards	187
Coachmakers	43
Chemical works	23
Various other works	55
	1,114

The actual injuries inflicted by these accidents was as follows:—

Nature of Injury.	Adults.	Young Persons.	Children.	Total.
Causing death	29	2	—	31
Amputation of right hand or arm	3	—	1	4
Amputation of part of right hand	29	23	—	52
Amputation of left hand or arm	1	—	—	1
Amputation of part of left hand	11	3	—	14
Amputation of leg	—	1	—	1
Fracture of limbs, &c.	75	9	—	85
Fracture of fingers	32	—	—	32
Injuries to head	97	18	—	115
Other injuries	688	91	—	779
	965	148	1	1114

There were only eighteen females, fourteen being adults, and four young persons; the rest of the 1,114 were males. Of the fatal accidents, only five were in any way caused by machinery, nearly the whole of the others having been caused by the falling of the injured persons from scaffolding or room platforms, or by the falling of iron, stone, or other heavy masses upon them.

The following causes enumerated in the surgeons' reports will show the uselessness of the services these gentlemen are

called upon to perform, of which some of them have expressed themselves to me in the strongest terms:

Accidents caused by		the falling of the injured person - - -	111
„	„	by the falling of iron bars, wheels, &c., &c. - -	230
„	„	sparks from hammers, &c. -	38
„	„	hot metal from furnaces, &c. -	73
„	„	hot water - - -	8
Accidents described as purely accidental, not being from machinery -			103
			563

Thus, the reporting of upwards of one half of the accidents at these works is simply useless; no regulations could be founded upon any practices which are not under the control of the men themselves, and however lamentable it is that such an amount of suffering should be incurred in the earning of daily bread, it is consolatory that none of the above can by any possibility be traced to a want of care upon the part of the masters, or of a reckless exposure of their hands to dangerous operations.

A very sensible departure has been made in the Act of 1867 from the rule laid down in the Factory Act of 1844. In the latter Act every accident that occurs to a person employed, and is of such a nature as to prevent the injured person from returning to work by 9 a.m. of the following day, must be reported; but in blast furnaces and iron mills no accident need be reported unless the injured person has been prevented returning to work for 48 hours.

The examination which I make of the accident reports shows me that the reporting of a very large number of accidents is a useless work, and I have no hesitation in saying that of the reports for the last half-year, for which the Government has paid upwards of 750*l.* in my district, at least two-thirds are merely waste paper.

My former colleague, Mr. Horner, who never lost sight of anything which would in the slightest degree contribute to the happiness or welfare of the factory operatives, reported his opinion strongly against the wasteful expenditure of money by the Government upon these accident reports.

For instance, in his report dated 30th April 1850 he says:—

"Those not caused by machinery might have happened in a dwelling house, and the investigation of them could have no tendency whatever to diminish their recurrence. It appears to me to be useless and a waste of public money."

And again, in 1852, he refers to the same subject:—

"I must again repeat what I have said upon former occasions, viz., that a great number of the accidents reported are of so trifling a nature that the cost of their investigation is a mere waste of the public money, for, having no tendency whatever to lessen the number of them, it can do no manner of good to the workpeople."

In the last report Mr. Horner presented, in summing up what in his opinion remained to be done, he strongly urges an alteration in the law of the reporting of accidents; he says:—

"It is long since I stated in my reports that the enactments which make it imperative that every accident to any person within the boundaries of a factory shall be reported and investigated require a careful revision. These enactments oblige the mill occupier to send a notice to the certifying surgeon appointed to his factory of every accident attended with bodily injury to any person employed therein, and the surgeon to go to the factory, investigate the accident, send a copy of the notice he had received to the Sub-Inspector, and to the Inspector a written report of his investigation. Now all this trouble to the mill-owner and all this work to the surgeon, which the public has to pay for, in a great majority of the cases do no manner of good.

* * * * *

Experience has shown that workers among machinery, especially children and young persons and even adults, who by habit become insensible of danger, must ever be exposed to accidents which no practicable precautions can prevent, and these constitute nineteen twentieths of those reported.

"31 Oct. 1859."

The object proposed by the reporting of accidents was that the Inspectors might ascertain the parts of the machinery by which accidents were caused, and thus be enabled to bring to the notice of the manufacturers how they could best prevent the occurrence of accidents in their factories. This as regards the Factories under the Act of 1844 has been done to a very great extent, and the reports which we receive of accidents from these factories rarely disclose any fresh source of danger, and I think that there is a clear demand that manufacturers should not be required to send notice of every accident that has occurred, that the certifying surgeon should be relieved of a duty which leads to no good, and that the Government money should be saved.

Every purpose would be answered if the reporting of accidents were confined to those which were caused by the moving power, the hoist, and by machinery in motion, and which are of such a nature as to prevent the injured person from returning to work for 48 hours after the accident.

The Workshops Regulation Act, 1867, is a natural and

excellent pendant to the Factory Acts Extension Act, 1867. It embraces every manual labour in the preparation of an article for sale, and thus the series of Acts from the Factory Act of 1833, including the Printworks and Bleachworks Acts, and the Acts of 1864 up to the legislation of 1867, present a code of laws extending to every hamlet in the country; and whatever defects there may be in some of the details of these laws, the principle is now of universal application, that no child shall work at any manual labour without attending school.

The administration of the Workshops Regulation Act, 1867, has been placed in the hands of the local authorities in their several jurisdictions. The local authorities vary—the mayor or the provost in corporate boroughs; the commissioners of police, the local boards, and the vestries in other places. But the Inspectors and Sub-Inspectors of Factories have power to enter any workshop independently of the local authority.

As I had ascertained that in many parts of my district the occupations carried on in workshops would come into direct competition with like occupations carried on in factories, it appeared to me to be incumbent upon me, as responsible for the prevention of overwork in factories in my district, to cause the fullest publicity to be given to the local authorities of their duties as administrators of the law, and to the occupiers of all workships of their responsibilities as employers of labour. I therefore sent, early in December last, a copy of The Workshops Regulation Act, 1867, to the local authority of every place in my district, and urged them to take the subject into their immediate consideration.

Mr. Sub-Inspector Oram having prepared an abstract of the Act, in a form suitable to be hung up in workshops, you were pleased to approve of its being printed, and of copies being extensively circulated to the local authorities, and 10,000 copies have already been distributed in my district. It would be hopeless to expect to be able to enforce an Act of Parliament, unless the authorities who are to administer it are acquainted with their duties, and the persons who have responsibilities imposed upon them are made thoroughly to understand what is required of them.

Many of the local authorities have already taken action in the matter, and a vast amount of good has been effected in establishments coming under the operation of the Act. I have the gratification of particularizing the vestry of St. George's, Hanover Square, as having been one of the first to put the Act in force, and they placed the

matter in the hands of their excellent medical officer, Dr. C. J. B. Aldis, whose attention was first called to the case of the milliners and dress-makers, and by his earnest and firm administration, regular and moderate hours of work have been introduced into nearly all such establishments within the district of St. George's, Hanover Squre.

I received a great number of complaints of irregularities under the Workshops Act soon after the passing of the Act; in many instances I called upon the principals, and in other instances the Sub-Inspectors explained the regulations which have since then come into operation. Although there were those who objected to any interference, yet, as a general rule, the principals have expressed their satisfaction that the law requires all manual labour to be dealt with alike, and their anxiety that the local authorities should see that it is impartially enforced.

By section 10 of the Workshops Regulation Act, 1867, it is enacted that whenever an Inspector or Sub-Inspector "enters any workshop and examines the persons therein," the Inspector shall report the fact of such entry and the condition of the workshop in his next half-yearly report. In compliance with that enactment, I annex in the Appendix a list of the workshops entered in my district up to the 30th April last. These inspections were made chiefly for the purpose of explanation, and to impress upon the employers of children and young persons the importance to themselves of their accepting the regulations in a frank spirit and endeavouring to fulfil the obligations placed upon them. It will be seen that Mr. Sub-Inspector Oswald inspected a large number of workshops connected with the lace trade. In these workshops in Nottingham, being to a large extent rooms in private houses, the winding of bobbins and the clipping of lace are carried on, and until the coming into operation of the Act children of tender years were employed in crowded ill-ventilated rooms, and for very long hours. Much of this has already been ameliorated, and when the local authority of Nottingham shall have taken the matter in hand an end will be put to the cruelty of keeping those little children in daily bondage unsuited to their age, detrimental to their physical development, and depriving them of any opportunity of gaining an early education.

I have, &c.

ALEXR. REDGRAVE.

The Right Honourable
Gathorne Hardy, M.P.
&c. &c. &c.

Appendix No. 1.

Half-yearly Report of Daniel Walker, Esq., Assistant Inspector of Factories, for the half-year ended 30th April 1868.

Broughty Ferry,
30th May 1868.

Sir,

I have to report to you that, since my appointment on 22nd January last as Assistant Inspector of Factories, I have been daily officially employed, either in visiting factories or in travelling and writing.

In the beginning of the year my time was almost exclusively occupied in visiting, in Dundee and the neighbourhood, the works brought under "The Factory Acts Extension Act, 1867." I afterwards, at your request, accompanied Mr. Saurin, the then recently appointed Sub-Inspector for the Edinburgh subdivision, to a number of the factories in Edinburgh and the neighbourhood; and I was also engaged for several days with Mr. Campbell, Sub-Inspector for the Glasgow subdivision, as well as with Mr. Chaytor in the Newcastle district, and Mr. Rickards in the Leeds district. You are also aware that I have gone over a considerable part of this subdivision with Mr. Cullen, as communicated to you, from time to time, when giving you more detailed accounts of my weekly employment.

I am glad to be able to state that I have not had much difficulty in administering the new law.

Upon the occasion of my first visit to the tobacco manufactories in Dundee, I found several children from eight to ten years of age working full time; and as some of their employers expressed a strong desire to establish a school and employ these children as half-timers, I considered that, in the exercise of a sound discretion, I ought to allow them, for a short time, while the masters should consider how a school could be best established, to work as they had been accustomed to do, rather than deprive them of employment, and, at the same time, of the prospect of obtaining some measure of education.

I was, however, very sorry to find, on again visiting these works, that no attempt had been made by the employers to establish a school, and I had therefore no alternative but to insist on all the children under eleven being discharged.

My experience of the tobacco manufactories in Edinburgh was very much the same as in Dundee.

In Glasgow, where the tobacco manufacture is carried on to a greater extent than in any town in Scotland, I also failed to induce the employers to adopt the half-time system, which they seemed to consider as unsuited to their trade. I, however, recommended several of them to give this mode of working a fair trial; and I am not without the hope that I may find it adopted to some extent when I next visit Glasgow.

With few other exceptions, I think the Factory Acts Extension Act of last session is popular, especially among the working classes, who duly appreciate the advantages it confers on them and their families.

Instances of objection occasionally occurred in visiting iron shipbuilders and letter-press printers. I trust, however, the recent decision of the justices at South Shields against the Palmer Shipbuilding Company of Jarrow will put an end to any further opposition, so far as concerns that branch of trade. With regard to letter-press printers, I was assured, and consequently found, that a great deal of the opposition to the new Act arose entirely from a misapprehension of its provisions. One of these gentlemen, who was in the outset very much opposed to the new Act, assured me that, when he became a partner, and took the management of one of the largest letter-press printing establishments in Edinburgh, it was not unusual to employ young boys on their premises from twenty to twenty-two out of the twenty-four hours; and he mentioned this very startling fact as showing the necessity which existed for placing letter-press printing under the regulation of the Factory Acts.

In consequence of a rumour, which was very prevalent in Glasgow, that the master letter-press printers intended to petition Parliament for an alteration of the law, so as to enable them to employ boys under sixteen during the night, I was requested to meet a deputation of the journeymen letter-press printers, which I did, along with Mr. Campbell; and they assured us that the new Act was working for great good, and that they, and their brethren throughout the country, would oppose any altetation or modification of it by every means in their power.

I am, Sir,
Your obedient servant,
DANIEL WALKER.

Alexander Redgrave, Esq.

Appendix No. 2.

Return of Informations under the Factories Regulation Acts, &c., in the District of Alexander Redgrave, Esq., for the Six Months ended 30th April 1868.

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	Remarks.
1867.			*In the Sub-Division of Mr. Patrick.*	£ s. d.	£ s. d.	
Jan. 29	Henry Lawton, How Gill Mill, Sedbergh, wool carder.	Rev. George Platt, and Thos. Wearing, Esq., Sedbergh, Yorkshire.	Employing a child before noon and after 1 o'clock of the same day.	1 0 0	0 9 0	
"	" "	" "	Employing the same child without a certificate of school attendance.	- -	0 7 0	Withdrawn on payment of costs.
Feb. 12	Booth and Hoyle, Oldham Road, Rochdale, cotton spinners.	Jas. Chadwick, Jonathan Nield, Thos. Ashworth, Jas. Brierley, and Rich. Hurst, Esqrs., Rochdale.	Employing a young person without having registered his name.	2 0 0	1 1 6	
"	" "	" "	Employing the same young person without a surgical certificate.	2 0 0		
Mar. 27	Levi Towler, Greta Mill, Burton in Lonsdale.	J. Farrer, E. M. Fenwick, and Thos. Wearing, Esqrs., Ingleton, Yorkshire.	Employing 22 females, young persons, and children after 6 o'clock p.m.	15 0 0	14 6 0	Convicted in five cases in the sum of 3*l.* each. The remainder not proceeded with on payment of costs.
1868.			*In the Sub-Division of Mr. Coles.*			
April 16	Joseph Harwood, Miller Brook, Heywood.	Joseph Fenton, James Fenton, and Richard Kay, Esqrs., Court House, Heywood.	Neglecting to limewash his factory within the time required by law.	3 0 0	0 15 6	

LIST OF INFORMATIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1868.			*In the Sub-Division of Mr. Coles*—cont.	£ s. d.	£ s. d.	
„	George Cartwright, parent, Heywood.	Joseph Fenton, James Fenton, and Richard Kay, Esqrs., Court House, Heywood.	Allowing his son, a child under the age of 13 years, to be employed as a young person.	1 0 0	1 4 6	
„	„ „	„ „	Neglecting to cause the same child to attend school as required by law.	0 5 0	1 4 6	
1867.			*In the Sub-Division of Mr. Rickards.*			
Nov. 25	Gill-royd Mill Company Morley.	Wm. Carr, and J. L. Hirst, Esqrs., Court House, Dewsbury.	Neglecting to fence an upright shaft, by which a woman was killed.	20 0 0	1 5 0	
Dec. 2	R. Seanor and Son, Rothwell.	S. G. Leatham and Percy Tew, Esqrs., Court House, Wakefield.	Employing two young persons more than seven days without surgical certificate.	2 0 0	1 8 0	One case withdrawn on payment of costs.
„ 20	J. and C. Peat, Otley Gill	F. A. Fawkes, and F. Darwin, Esqrs., Court House, Otley.	Employing two young persons after 6 p.m. -	2 0 0	1 5 0	
„	John Waite, Otley Gill -	„ „	Employing one young person after 6 p.m. - -	2 0 0	0 12 6	
„	Ings Mill Company, Guiseley.	„ „	Employing one young person after 6 p.m. - -	3 0 0	0 12 6	
„ 21	Ann Taylor, Knottingley	Wm. Wood, Esq., and Rev. T. H. Hall, Court House, Pontefract.	Obstructing sub-inspector in the execution of his duty by attempting to conceal a child then at work.	- -	0 11 0	Withdrawn on payment of costs on account of the defendant's poverty.

LIST OF INFORMATIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1868.			*In the Sub-Division of Mr. Rickards*—cont.	£ s. d.	£ s. d.	
Jan. 17	Spring-head Mill Company, Guiseley.	F. A. Fawkes, and J. H. Dawson, Esqrs., Court House, Otley.	Employing four young persons after 6 p.m. - -	4 0 0	2 18 0	
„	Ab. Moon, Guiseley - -	„ „	Employing one young person after 6 p.m. - -	- -	0 9 0	Withdrawn on payment of costs, as defendant believed the young man was above 18 years.
„	Wm. Lee, Guiseley -	„ „	Obstructing Sub-Inspector in the execution of his duty, by concealing four young persons.	3 0 0	0 14 6	
			In the Sub-Division of Mr. Oram.			
April 17	Edward Partington - -	Robinson Fowler, Esq., stipendiary magistrate, City Police Court, Manchester.	Employing his child both before noon and after one of the clock in the afternoon of the same day.	1 0 0	0 10 0	
„	„ „	„ „	Not causing the said child to attend school - -	1 0 0	0 10 0	
			In the Sub-Division of Mr. Henderson.			
Mar. 14	William Bracewell, cotton spinner, Barnoldswick, Yorkshire.	T. H. Ingham, J. R. Tennant, John Coulthurst, F. J. Lace, Thos. F. C. Lister, John N. Preston, and John W. Tollie, Esqrs., Petty Sessions, Skipton.	Employing 100 women and young persons during the time set apart for meals.	50 0 0	31 7 0	The defendant having admitted the charge, 50 cases were withdrawn on payment of costs.

LIST OF INFORMATIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1867.			*In the Sub-Division of Mr. Lakeman.*	£ s. d.	£ s. d.	
Nov. 16	Atkinson and Son, Clough Mill, Sowerby Bridge, woollen manufacturers.	Samuel Waterhouse, M.P., Wm. Henry Rawson, and Joshua Appleyard, Esqrs., West Riding Court, Halifax.	Having made a false entry in the register of young persons of the date of employment of a boy, by erasing the former date and substituting one of five weeks later.	20 0 0	0 12 6	
„ 16	„ „	„ „	For having employed the same boy without a surgical certificate for a longer time than is allowed by law.	2 0 0	0 12 6	
1868. Jan. 18	William Brierley, operative cotton spinner, George Street Mill, Brighouse.	John Waterhouse, Samuel Waterhouse, M.P., William Hy. Rawson, Joshua Appleyard, and Samuel Shaw, Esqs., West Riding Court, Halifax.	Having employed a child before noon and after one of the clock on the day of the 27th December 1867.	1 0 0	0 9 6	
„	Ellis Byram, operative cotton spinner, Victoria Mills, Brighouse.	„ „	Having employed a child before noon and after one of the clock on the day of the 27th December 1867.	1 0 0	0 11 6	

LIST OF INFORMATIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1868.			*In the Sub-Division of Mr. Lakeman*—cont.	£ s. d.	£ s. d.	
Feb. 13	John Stephenson, Shade Mill, Todmorden.	Captain Sutcliffe, Rev. T. Sutcliffe, Abm. Ormerod, John Fielden, and Geo. Hinchliffe, Esqs., Todmorden.	Having neglected to send a notice to the certifying surgeon of an accident to a girl employed in his factory.	3 0 0	2 4 0	This case was heard before the Todmorden Bench in May 1867, and dismissed. A case was given for the Court of Queen's Bench, the decision was reversed, and remitted with their Lordships' opinion that the Magistrates ought to have convicted.
„ 15	John Fox, One Cliffe Mill, Greetland.	John Waterhouse, Major Stansfield, William Hy. Rawson, Joshua Appleyard, and Saml. Shaw, Esqs., West Riding Court, Halifax.	Having employed a child before noon and after one of the clock on each day during the week ended 21st January 1868.	1 0 0	0 14 0	
„	„ „	„ „	Having obstructed the Sub-Inspector in the execution of his duty, by attempting to conceal the same child.	5 0 0	0 14 0	
„ 18	Townend, Brear, and Co., Wade Street, Halifax.	Wm. Huntriss and George Whiteley, Esqs., Town Hall, Halifax.	Having employed two children for three weeks without a school certificate.	2 0 0	1 1 0	Two cases out of eight were deemed sufficient to be taken.

LIST OF INFORMATIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1868.			*In the Sub-Divlsion of Mr. Lakeman*—cont.	£ s. d.	£ s. d.	
Apr. 18	Messrs. Eastwood Brothers, Pepper Hill, Midgley.	Sir Henry Edwards, Bart., M.P., Saml. Waterhouse, M.P., Willm. Hy. Rawson, and Joshua Appleyard, Esqs., West Riding Court, Halifax.	Having employed a child without a surgical certificate, and after refusal by the certifying surgeon.	2 0 0	1 14 6	
,,	,, ,,	,, ,,	Having employed the same child before noon and after one of the clock on the same day.	1 0 0	0 12 6	
,,	,, ,,	,, ,,	Having employed the same child without a certificate of school attendance for the foregone week.	1 0 0	0 9 6	
,,	Mary Robertshaw, weaver at Pepper Hill Mill.	,, ,,	Having permitted the illegal employment of her child.	0 10 0	0 9 6	
,, 21	Green and Battersby, Booth Town.	James Bowman and George Whiteley, Esqs., Town Hall, Halifax.	Having employed a child without the registration of her name, and the date of the first day of employment.	2 0 0	1 2 0	

LIST OF INFORMATIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1868.			*In the Sub-Division of Mr. Lakeman*—cont.	£ s. d.	£ s. d.	
Apr. 21	Green and Battersby. Booth Town.	James Bowman and George Whiteley, Esqs., Town Hall, Halifax.	Having employed the same child without a surgical certificate and after refusal by the certifying surgeon.	Dismissed.		On the ground that, as the surgeon was sent for, there was no intention to break the law, and because the certifying surgeon could not swear to the child being the one refused, and because the Sub-Inspector visited the Factory very shortly after the certifying surgeon had left.
„ 23	Samuel Simpson, manager of Spa Hole Factory, Stansfield.	Captn. Sutcliffe, Revd. Thos. Sutcliffe, M.A., John Fielden, Abm. Ormerod, and George Hinchliffe, Esqs., Court House, Todmorden.	Having employed a young person for some months without having previously registered his name and the date of the first day of his employment in the register for young persons.	3 0 0	0 11 6	
,,	,, ,,	,, ,,	Having employed the same young person without a surgical certificate.	3 0 0	0 11 6	
			In the Sub-Division of Mr. Oswald.			
Oct. 31	John Heywood, Lees -	J. Chadwick, N. Buckley, S. D. Lees, G. Andrew, and W. Garforth, Esqs., Ashton County Sessions.	Allowing his child to be employed for more than six and a half hours in one day.	0 5 0	0 10 0	

Appendix No. 3.

Accidents in Factories, Bleachworks, and Works under the Provisions of the Act of 1864.

Table No. I.—*Accidents arising from Machinery.*

Nature of Injury.	Adults.		Young Persons.		Children.		Total.		
	M.	F.	M.	F.	M.	F.	M.	F.	M&F.
Causing death	10	2	6	2	–	–	16	4	20
Amputation of right hand or arm	2	2	2	–	–	–	4	2	6
Amputation of part of right hand	29	13	21	33	10	4	60	50	110
Amputation of left hand or arm	4	2	1	1	–	–	5	3	8
Amputation of part of left hand	23	11	21	35	3	5	47	51	98
Amputation of leg	–	–	–	–	1	–	1	–	1
Fracture of limbs or bones of trunk	36	9	18	16	12	2	66	27	93
Fracture of hand or foot	27	27	23	26	14	11	64	64	128
Injuries to head or face	38	47	37	23	12	6	87	76	163
Lacerations, contusions, and other injuries not enumerated above	249	173	216	224	102	52	567	449	1016
Total	418	286	345	360	154	80	927	726	1643

Table No. II.—*Accidents not arising from Machinery.*

Nature of Injury.	Adults.		Young Persons.		Children.		Total.		
	M.	F.	M.	F.	M.	F.	M.	F.	M&F.
Causing death	10	3	1	1	–	–	11	4	15
Amputation of right hand or arm	–	–	–	–	–	–	–	–	–
Amputation of part of right hand	2	–	–	–	–	–	2	–	2
Amputation of left hand or arm	1	–	–	–	–	–	1	–	1
Amputation of part of left hand	–	–	–	–	–	–	–	–	–
Amputation of leg	–	–	1	–	–	–	1	–	1
Fracture of limbs and bones of trunk	17	2	5	7	3	–	25	9	34
Fracture of fingers	1	–	1	1	1	–	3	1	4
Injuries to head or face	17	1	2	3	2	1	21	5	26
Lacerations, &c.	36	11	16	8	11	2	63	21	84
Total	84	17	26	20	17	3	127	40	167
Total No. reported	502	303	371	380	171	83	1044	766	1810

Appendix No. 4.

List of the "Workshops" under "The Workshops Regulation Act, 1867," visited by the Inspector or the Sub-Inspector of Factories in the district of Mr. A. Redgrave, during the six months ended the 30th April 1868.

By Mr. Sub-Inspector Coles, Manchester.

March 14, R. Brighouse, Pendleton, ropery.
„ S. Hundley, Pendleton, ropery.
„ D. Galloway, Pendleton, ropery.
„ Chas. Sutton, Salford, ropery.
„ T. Sargeson, jr., Pendleton, ropery.
March 19, J. Underwood, Salford, ropery.
„ W. Campbell, sen., Salford, ropery.
„ H. Cardwell, Collyhurst, ropery.
„ W. Goodwin, Salford, ropery.
„ J. Kitson, Salford, ropery.
April 14, R. Dixon, Newton Heath, picker-maker.
„ J. Crook, Manchester, wholesale clothier.

By Mr. Sub-Inspector Oswald, Nottingham.

Feb. 27, Mrs. Hall, Colwick Street, Nottingham, lace clipper.
Feb. 28, W. Palethorpe, Marygate, Nottingham, lithographic printer.
„ Burrows, Bros., Marygate, Nottingham, lace warehouse.
„ Dent, Allcroft, and Co., St. Mary's Place, Nottingham, gloves.
„ Jaffray and Co., Broadway, Nottingham, lace warehouse.
March 2, John Leavesley, Normanton Street, Nottingham, lace dresser.
„ William Marshall, Poplar, Nottingham, lace clipper.
March 3, Mrs. Bridget, Broadmarsh, Nottingham, lace clipper.
„ Mrs. Rudd, Sussex Street, Nottingham, lace clipper.
„ James Rowell, Harrington Street, Nottingham, lace clipper.
„ James Sanders, Harrington Street, Nottingham, lace dresser.
March 4, Boden and Co., Fletcher Gate, Nottingham, lace warehouse.
„ Dent, Allcroft, and Co., St. Mary's Place, Nottingham, gloves.
„ Mrs. Barton, Lister Gate, Nottingham, milliner.
March 6, Camer and Sons, Mount Street, Nottingham, hosiery warehouse.
„ Mrs. Beard, Angel Row, Nottingham, milliner.
March 12, Burrows, Bros., Marygate, Nottingham, lace warehouse.
„ Ellam and Jones, Markeaton, Derby, colour works.

March 13, Bush and Co., Peter Gate, Nottingham, carriages.
„ E. Goldschmidt, Halifax Place, Nottingham, box-maker.
„ Mr. Hackett, High Street, Radford, lace clipper.
March 14, Samuel Grundy, Stapleford, clothier.
„ Mrs. Wood, Stapleford, gymping, &c.
„ Harrison Tisson, Stapleford, lace warehouse.
March 17, Mrs. Spanton, Rigley's Yard, Nottingham, lace clipper.
„ Patent Edging Co., Horkley Mill, Nottingham, lace.
„ John Jackson and Son, Rigley's Yard, Nottingham, ladies' clothing.
„ Henry Walker, Chapel Yard, Nottingham, lace clipper.
„ Hollins, Son, and Co., Marygate, Nottingham, lace warehouse.
„ W. Marriott, Marygate, Nottingham, bonnet fronts.
„ T. S. Dobson and Co., Marygate, Nottingham, lace warehouse.
March 18, W. Clarke, Marygate, Nottingham, lace warehouse.
„ Mrs. Bridgett, Broad Marsh, Nottingham, lace clipper.
„ Mrs. Rudd, Sussex Street, Nottingham, lace clipper.
„ James Rowell, Harrington Street, Nottingham, lace clipper.
„ Mrs. Rowell, New Bridge Street, Nottingham, lace clipper.
„ Edwin Meats, Isabella Street, Nottingham, lace dresser.
March 19, Mrs. Knight, New Basford, bugling.
March 21, John Burton, De Ligne Street, Radford, lace clipper.
„ W. Pickering, Montfort Street, Radford, lace clipper.
March 24, Hamel Wright, Commerce Square, Nottingham, lace warehouse.
„ Reckless and Co., Marygate, Nottingham, lace warehouse.
„ A. Brownswood, Marygate, Nottingham, lace warehouse.
„ F. and A. Cleaver, Meadows, Nottingham, lace dressers.
„ James Wright, Machine Street, Nottingham, lace.
March 27, William Knott, King's Street, Oldham, hatter.
„ Buckley Prockter, Bottom-o'-Moor, Oldham, milliners, &c.
March 31, W. and J. Potter, Market Place, Oldham, milliners, &c.
„ P. Leach, Market Place, Oldham, milliners, &c,
„ John Partington, Rhodes Bank, Oldham, bobbins.
„ T. Partington and Son, Wood Mill, Oldham, bobbins.
April 3, L. Haslop, John Street, Oldham, hatter.
April 4, James Wilde, Southgate Street, Oldham, brushes.

April 11, Squire Kay, West Street, Oldham, hatter.
April 16, J. Breasley, Union Street, Oldham, skips.
April 17, William Wade, Whyton Mill, Saddleworth, bobbins.
„ Ammon Platt, Woolroad, Saddleworth, saw-mill.
April 25, Daft and Jessop, Long Row, Nottingham, milliners.
April 29, Ann Barks, 9, Milk Street, Nottingham, lace clipper.
„ John Frescoin, Glasshouse Street, Nottingham, lace clipper.
„ Mrs. Aulsebrooke, Clare Street, Nottingham, lace clipper.
„ James Hall, 11, Newton Street, Nottingham, lace clipper.
„ Mrs. Hutchinson, Newcastle Street, Nottingham, lace clipper.
„ Mrs. Knowles, Mount East Street, Nottingham, lace clipper.
„ John Bosworth, Mount East Street, Nottingham. lace clipper.
„ T. Hall, Wat Street, Nottingham, lace clipper.
April 30, Mrs. Benton, Tyler Street, Nottingham, lace clipper.
„ Mrs. Wathey, Tyler Street, Nottingham, lace clipper.
„ Mrs. Adamson, Coldham Street, Nottingham, lace clipper.
„ Saml. Cummony, Eldon Street, Nottingham, lace clipper.
„ Mr. Watson, Eldon Street, Nottingham, lace clipper.
„ Mr. Walker, Cass Lane, Nottingham, lace clipper.

By Mr. Sub-Inspector Paget, Bradford.

April 20, John Hardaker, Little Norton Lane, builder.

Report of Robert Baker, Esq., Inspector of Factories, for the Four Months ended April 1868.

Factory Inspectors' Office, 10, *Whitehall, S.W.,*
Sir, 30*th April* 1868.

Since the date of my last report I have been engaged for the most part in organizing and bringing into operation, the Factory Act Extension Act, 1867. I have therefore very few circumstances to mention to you on the condition of the works and workers, of which I have had to speak on former occasions.

The state of trade in the districts where the textile trades are carried on has precluded the probability of much, if any, overtime; and, for the same reason, the employment of children cannot fail to have diminished, and their education under the Factory Laws must have been seriously interrupted.

It is true that the law provides, if a child is employed and sent to school any day in the week, it must go to school every day during that week; but as the parent is often called upon to contribute towards the school wage, his ability to send his child to school in bad times is not dependent wholly on his inclination, but is diminished by causes over which he has no control; and when the child is also out of work he becomes more unwilling still to continue an expense, the product of which he is unable to appreciate.

The state of trade has been so continuously uncertain and unimproved in all branches that it is much to be feared great losses have accrued to the manufacturer, and considerable privations to the working classes. It has needed no disunion between the employers and employed to aggravate the conditions to which both have been subjected. In the textile districts, by reason of their greater intelligence and providence, there has, I think, been less absolute want than in the fictile and hardware districts. In the latter, the families have suffered most severely, even when the husbands have been partially fed by the unions of which they have been members. With respect to the cotton trade, and the effects of the cotton famine upon it, one fact illustrative of the energy of the manufacturers and their workers has been brought out with singular force, and I venture to think is most suggestive.

The following table, constructed from the figures taken from a manufacturer's books, and supplemented by others from the books of an eminent cotton broker in Liverpool, appears to show, at all events, that, whatever restrictions may have been placed by law upon the persons employed in cotton manufacture—

1st. That machinery has increased, and by its being rendered more perfect to meet conditions of the trade hitherto unknown, or only partially so, the employers have been enabled to produce more yarn with fewer hands.

2nd. That the diminution of the number of hands is, after all, not quite two per cent.

3rd. That the average wages per head have increased in seven years 27 per cent. to the remaining workers.

4th. That the production of pieces appears to have been at its maximum, either so far as the demand or as the present construction of the looms were concerned, four years ago.

5th. That the production of American cotton does not appear to have kept pace with the demand for it.

6th. That the demand for Indian cotton seems likely to increase considerably. And,

7th. That the state of supply and demand will enforce a further supply from any quarter of the world where cotton will grow, and from whence any reasonable means of transit can be obtained for it; but that as a long time must elapse before all these changes can take place, the cotton manufacture of the United Kingdom appears likely to remain in a very fluctuating state, and subject to violent impulses, prejudicial to its interests.

If it used to be true that, "the progress of manufacture "was to produce more goods and to reduce wages in order "to arrive at a former profit lessened by competition, so "now it would seem that, the progress of manufacture must "be to increase the practical skill of the operative, and thus "to increase wages rather than diminish them. For it is to "be observed," says my informant, "that the per-centage "increase of spindles and of yarn spun is the same, but "less per cent. than the average rise of the wages of the "workers. It might, however, be added, that the weight "of yarn and number of 25-yard pieces is no criterion, as "the counts of yarn being finer or coarser will make all "the difference, as also will the pieces, whether they be "woven open or closely picked. We are never two weeks

" together on the same style of cloth, but follow the market,
" so that a difference in weights or pounds, without all the
" circumstances, is no guide."

The difference shown by the table in the diminution of hands is so small as hardly to constitute an item of consideration in the employment of a district. I have no means of ascertaining what class of hands it is that has been lessened; but I am inclined to think, from other circumstances, that it is the short timers, and therefore the lowest wage hands, by which the gross number employed in 1868, has been reduced from what they were in 1861. Other returns of a similar character show the increase of wages to be only 23 or 24 per cent.

With respect to the cotton supply, it is hardly within my province to venture even a suggestion; but in the course of visits one picks up theories of warp and woof which may suggest a thought for abler gatherers of facts to bind together, and therefore there cannot be much harm in presenting one for observation. Thus it was suggested in the course of conversation, by one who ought to know, that many of the cotton-growing lands of America are likely to be divided into small farms, and that corn will have to be grown for food, necessarily, in the place of cotton. And further, that " while the manufacturers are always a rope
" of sand, the only people who can stick together, are the
" cotton brokers of Liverpool."

TABLE of the NUMBER of WORKPEOPLE in one Cotton Mill (fairly representing the Trade), aggregate Wages paid per Week, average Wages per Head, number of Spindles and Looms, Pounds of Yarn spun, Pieces produced of 25 Yards to the Piece, in the Three Years of 1860–1, 1864–5, 1867–8, with the consumption of Cotton in these same Years in the United Kingdom.

Month.	Year.	Number of Workpeople.	Aggregate Wages paid per Week.	Wages per Head.	Number of Spindles.	Number of Looms.	Pounds of Yarn Spun.	Pieces produced.	Average Yards to the Piece.	Consumption of Cotton in Bales.					
										American.	East Indian, &c.	All other kinds.	Total.	Average Weight per Bale in Pounds.	Total Pounds.
			£ s. d.	s. d.											
March - -	1860-1861	2,100	1,161 13 0	11 0½	95,560	2,113	81,308	16,194	25	2,041,000	160,000	186,000	2,387,000	433	1,033,571,000
April - - -	1864-1865	1,955	1,218 0 0	12 5	103,342	2,083	90,339	19,151	25	134,000	942,000	490,000	1,566,000	357	559,062,000
April - -	1867-1868	1,893	1,339 1 9	14 2	103,778	2,111	99,372	18,203	25	1,286,000	895,000	723,000	2,904,000	375	1,089,000,000
Increase or Decrease in the 8 years -	—	Dec. 1·9 per cent.	Increase 15 per cent.	27 per cent.	22 per cent.	—	22	12	—	—	—	—	—	—	The consumption 15 per cent.

Accidents.

I defer to future consideration my observations on accidents, since those to which I have been in the habit of referring, which have exclusively had reference to textile works, are henceforth to be associated with those of other trades for the first time brought under review.

General Topics.

Permit me to renew in this report the consideration of three or four topics to which I have before directed the attention of the Secretary of State and of the legislature, in the hope that they would ultimately be remedied.

The first is, the application of the law to flax scutching mills, and thus, not only to diminish the serious accidents which occur therein, but to afford the workers the benefit of protection and of reduction in hours to which, in common with other textile works, they are entitled.

The second, is the application of the Factory Acts Extension Act, 1864, to all brick yards but those in which bricks usually so known, and agricultural pipe tiles are made.

The third, to fix the fees to be taken by clerks to the justices in factory cases against operatives and parents. And the

Fourth, to give Greenwich time throughout the kingdom at one o'clock in the day.

Now, Sir, I hope I do not travel an atom out of my way to press these four points on your attention. They all legitimately belong to my office to do so, and: if I seem pertinacious about it, I trust you will forgive me.

With respect to scutching mills, I will once more repeat that, in 1850 the subject of scutching mills was brought under the notice of the inspectors at a full board, and discussed, and laid aside on the ground of its being an agricultural operation; but all this was in the past, when scutching was done in farm sheds, and when every person scutched his own growth of flax as he best might. Now, the case is different. The process of scutching flax, compared with what it was half a century ago, is more mechanical and extensive. Instead of being performed in small sheds by hand, substantial factories, in which machinery moved by steam, water, or other mechanical power, have either been appropriated or erected for this first process in flax manufacture; and of such a magnitude are they as to employ large numbers of people, and to call as much for the regulation of the hours of labour, and for the fencing of machinery, as any other manufacture

under restriction. Independently of the unrestrained hours of work, and the consequent deterioration of the physique, and of the neglected education of the workers, the dust occasioned by the manipulation of flax in scutching is so dense as to be exceedingly prejudicial to the mucous membranes; whilst the accidents which occur, are frequently of the most serious character. There has been legislation, since the passing of the Factory Acts thrice, to regulate the dust of other works; there is, therefore, still the greater reason why that of scutching mills should be no longer tolerated.*

The term "scutching," in the 3 & 4 W. 4. c. 103. s. 1., is one of the processes in general manufacture expressly indicated to be brought under legislative protection. To the present time it has been applied only to cotton. But in my report for October 1865, p. 77, I showed, from the testimony of two of the most important scutching machinery makers in Belfast, that the method of scutching practised by our forefathers had become wholly changed, and from being a domestic, was now become a purely manufacturing process. There can, therefore, be no doubt now about the applicability of the law to it.

Permit me to give, once more, an abstract of these opinions.

Messrs. McAdams, Brothers, of Belfast, say—

"We have to express our opinion, decidedly, that the scutching of flax is a manufacturing operation. When the scutching is conducted in a scutch-mill altogether separate from the farm where the flax is produced, there can be no doubt about it. The men who work at the machinery are not farmers, but persons who follow the trade of scutching, which they have learnt. When the scutching of flax is performed by hand on the premises of the farmer, it may, perhaps, be regarded by some as an agricultural operation; but, properly speaking, even then, it is a manufacturing operation. If a farmer scutches, spins, or weaves on his own premises, he is becoming a manufacturer as well as an agriculturist."

M. Friedlander says—

"As soon as the farmer gives the straw out of his hands to be scutched in an establishment got up specially for this purpose, it becomes subject to a manufacturing process."

The few accidents given in my last report, out of the many that annually occur in scutching mills, afford sufficient

* Factory Extension Act, 1864, Earthenware. Factory Acts Extension Act, 1867. Workshops Regulation Act, 1867.

evidence of the dangerous nature of the machinery employed, and of the protection which it requires to ensure the safety of the workers. I will not pain you by a re-collation of them, but respectfully refer you to the report itself (Inspectors' Reports, October 1867, p. 62) for a detail there given; and I sincerely trust your decision will be to place all these works under the law now, whatever may have been the hesitation about it before, especially as such works are likely to be increased. Their present number is 1,540.

Secondly, with respect to brickyards—

The Factories Acts Extension Act, 1864, is made applicable to all kinds of earthenware, "except bricks and tiles, not being ornamental tiles." But it frequently happens that where bricks and tiles are made, other kinds of earthenware are occasionally made in very small quantities, such as flower pots, chimney pots, &c., and also pipe tiles, *i.e.*, small pipes for agricultural purposes, quarries, retorts, and sanitary pipes of all sizes, none of which articles, except tile pipes, can by any construction of terms be deemed either bricks or ornamental tiles.

In consequence, I believe, of some remonstrance made to the Secretary of State at that time, the Inspectors received instructions, under date the 6th of December 1864, not to inspect factories where any kinds of pipes were made, whether for drainage or sewage; and the consequence is, that many of the articles which clearly come under the Earthenware Act, 1864, employing less than 50 hands, and made in places which we are forbidden by this letter to inspect, are manufactured without any restrictions as to hours and education: and large numbers of children are thus left, not only in serious competition with the yards that employ more than 50 hands, but without any care whatever for their moral welfare.

Let me quote to you a graphic line or two from a letter addressed to me by a resident among them. "I wish to "call your attention to a great evil in this 'black country,' "and that is the employment of women on pit banks and "in clay mines. I consider it a degradation to the female "sex, a perfect source of immorality, and a disgrace to the "age in which we live."

And this is undoubtedly true, and far more than this is true. The scanty dresses of these workers, the evil associations which they form, and the attitudes they are compelled to assume, lead to an obscenity of language and manner which cannot be described, and is difficult to imagine. We may be assured that few women would work in such yards

bespattered with clay, and witnesses to the most brutalizing examples, who have any sense of the dignity of virtue, or of that pure morality which is woman's greatest perfection. Driven as a child from home by the spendthrift sensuality of parental greed, she is early initiated to the most degraded condition of life, and, day by day covered with the dirt of her occupation, no wonder she delights in every thing which adds to her material indulgencies, and becomes the pariah she is. Add to all this, the everlasting Sunday work of turning and patting the drying bricks, her want of education, of good examples when a child, and the disregard of decency as a girl, and we have everything which can be parasceuastic to the descending scale of her after life.

The apparent answer to all this, at first sight, is, that if places where 50 hands are employed come under the Factories Acts Extension Act, 1867, then, those places where less than 50 hands are employed will in like manner come under the Hours of Labour Regulation Act. But this is really not so. For by clause 5, sect. 6, 30 & 31 Vict. c. 103, it is enacted, that any factory subject to the provisions of the Factories Acts Extension Act, 1864, shall be excluded from the provisions of the Extension Acts, 1867; whilst by the Hours of Labour Regulation Act it is enacted, s. 5, "This Act shall not apply to any factory or part of a "factory or other place subject to the jurisdiction of the "inspectors of factories in pursuance of any Act already "passed or which shall be passed during this present "session." Thus those brick yards, where less than 50 hands are employed, and those, where sanitary pipes are made that a man might creep through, which are clearly neither bricks nor tiles nor tile pipes, but amount to a very considerable number, are exempt altogether from surveillance; whilst those brick and tile yards where 50 hands are employed come under it, and those where bricks and tiles (not being ornamental tiles) alone are made, fall under the Hours of Labour Regulation Act.

To get rid of an anomalous state of things so unsatisfactory as this, I venture to recommend that the Secretary of State's letter of the 6th of December should be withdrawn. Everything connected with earthenware would then fall into its proper channel. The manufacture of earthenware would be placed under the Factories Acts Extension Act, 1864; and the brick and tile pipe yards of all neighbourhoods would become subject to local supervision, as a matter of course.

3dly. With respect to regulating the fees of magistrates'

clerks, and the officials at petty sessions, in cases of the prosecution of parents and workmen (for to these I would limit the relaxation), there is a precedent for it in the 5 Geo. IV. c. 96, entitled "An Act to consolidate the laws relative to the arbitration of disputes between masters and workmen," in which it is enacted that no higher fees shall be allowed to be taken for any proceeding under this Act, that is to say:—

To the clerk of the justice or justices—	
For each summons - - -	Twopence.
For every oath or affirmation -	Threepence.
For drawing and entering the order	Fourpence.
For every warrant - - -	Sixpence.
To the constable or peace officer—	
For a service of summons or order -	Fourpence.
For executing warrant and distress and sale of goods - - -	One shilling.
For custody of goods distrained, per diem - - - -	Threepence.
For every mile he shall travel -	Threepence.
For every caption - - -	Sixpence.

The necessity for prosecuting a parent, as in the instance of neglected schooling, or for conniving at the higher age of a child than is legal, or for forging a false certificate of its birth, and many similar things; or, in the case of a workman, when, as either under the law or under the special rules of either the Earthenware Act or the Factories Act Extension Act, 1867, (in both of which cases such rules are in operation,) the onus of being a principal is thrown upon them under the Factories Act, or of being negligent, under the Extension Act, 1867, will henceforth often arise. And most legitimately arise, too, if we wish to hold a fair and even hand between the will of the employer to do right, and the determination of the parents or of the workers to do wrong. But the hardship of all such prosecutions under the present powers of the common law is that, the fine and expenses together are so much more than commensurate with the offence to be punished. Often and often we are compelled to withdraw cases previous to conviction, that the expenses, which we cannot help, may form the penalty only; and many parents, who ought to be made sensible of their educational liabilities to their children by a small fine, are let off from this cause alone. It would be far more dignified, therefore, if the penalty should stand, and the expenses be reduced, than that the penalty should be foregone on account of the fees. Considering the very great responsibilities, too, which are now thrown on parents and work-

men, I think whatever arguments suggested the legal fees of the 5 Geo. IV. c. 96. may be safely urged in favour of the same fees for all the Factory Acts.

4thly. With respect to universal time at one o'clock at noon, my previous proposition that this hour should be notified by telegraph to all the industrial towns and neighbourhoods of the United Kingdom, has met with an active response from many quarters, but has not yet been successful. Of its positive necessity, or of its being the incumbent duty of somebody to provide it, there can be no doubt. Laws have been passed requiring that, the hours of labour of all workers under them shall be regulated by public clocks everywhere, or by some other clock, to be open to public view, and to be approved of in either case in writing under the hand of the Inspector or Sub-Inspector of the district; and yet there is scarcely in any town, clocks, that may be called "public clocks," which show true time; nor even railway clocks at two different stations without an interval of several minutes betwixt them. The enforcement of the Factory Laws without true time presents a legal difficulty of no small magnitude, into which, however, I need not further enter.

The following gentlemen have been appointed CERTIFYING SURGEONS in England and Wales, between 1st October 1867 and 30th April 1868:

Abingdon, Berks.—S. J. Baker, Esq.
Atherstone.—G. W. Mousley, Esq., M.B.
Bangor.—H. R. Hughes, Esq.
Brixham.—C. H. Brooking, Esq., M.D.
Bruton, Somerset.—E. Higinbotham, Esq.
Burnham.—W. H. G. Phelps, Esq., M.D.
Cardiff.—H. J. Paine, Esq.
Cheddar.—J. Lawrence, Esq.
Cinderford.—C. Whatmough, Esq., M.D.
Colyton.—J. Snook, Esq.
Dartmouth.—T. Puddicombe, Esq.
Dawlish.—F. M. Cann, Esq.
Dunstable.—F. Farr, Esq.
Exmouth.—W. S. Land, Esq.
Garston near Liverpool.—J. V. Worthington, Esq.
Harrington.—J. Dick, Esq., M.D.
Hemel Hempstead.—S. B. Farr, Esq.
High Wycombe.—B. M. Bowstead, Esq., M.D.
Ivybridge.—A. Newsam, Esq.
Kettering.—J. L. Price, Esq.
Keynsham.—R. Colthurst, Esq., M.D.

Kilmersdon near Bath.—J. E. Bennett, Esq., M.D.
King's Norton.—W. Brown, Esq.
Langport, Somerset.—J. Prankerd, Esq.
Leighton Buzzard.—E. Lawford, Esq., M.D.
Longtown near Carlisle.—F. B. Graham, Esq.
Luton.—F. Clarke, Esq.
Lydney.—J. Gimblett, Esq., M.D.
Market Deeping.—J. Kelly, Esq.
Mells near Frome.—G. Terry, Esq.
Milborne Port, Somerset.—S. N. Parsons, Esq.
Nailsea near Bristol.—G. Adams, Esq.
Newton Abbott.—F. J. Gillard, Esq.
Ormskirk.—C. Palmer, Esq.
Oxford.—H. P. Mallam, Esq. (vice P. F. Freeborn, Esq., resigned.)
Radstock.—W. S. J. H. Munro, Esq., M.D.
Rainford, near St. Helen's.—G. Tobin, Esq. (vice T. Shepherd, Esq.)
Rothwell, Northampton.—J. More, Esq., M.D.
Ruthin.—W. Jones, Esq.
St. Helen's.—A. Jamieson, Esq., M.D.
Sidmouth.—T. H. S. Pullen, Esq.
Somerton, Somerset.—E. W. Valentine, Esq.
Southam.—D. Rice, Esq.
Stapenhill near Burton-on-Trent.—N. Mant, Esq.
Stratford-on-Avon.—B. Rice, Esq., M.B.
Street.—J. Hill, Esq.
Sutton Coldfield.—J. H. Lakin, Esq.
Torquay,—W. B. Hartland, Esq.
Walsall.—A. J. Harrison, Esq. (vice J. Burton, Esq., M.D.)
Watchet.—C. Williams, Esq.
Wednesbury.—C. W. Iliffe, Esq.
West Bromwich.—B. S. Browne, Esq.
Wells.—R. Purnell, Esq.
Wilton, Wilts.—A. Cooper, Esq., M.D.
Wincanton.—J. Surrage, Esq., M.D.
Wiveliscombe.—A. F. Edwards, Esq.
Wolverton.—F. R. Webster, Esq.
Woburn, Bucks.—R. Price, Esq.

I have the honour to be,
Sir,
Your most obedient servant,
ROBERT BAKER.

The Right Hon.
the Secretary of State
for the Home Department,
&c. &c. &c.

Appendix No. 1.

Return of Prosecutions for Offences against the Factory, &c. Regulation Acts, in the District of Robert Baker, Esq., Inspector of Factories, during the Six Months ended 30th April 1868.

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	Remarks.
				£ s. d.	£ s. d.	
1868.			*Informations laid by Mr. Kent.*			
April 24	W. Williams, Cynwyd -	Rev. J. Wynne and Capt. Taylor, Corwen Petty Sessions, Corwen Justice Room.	Employing a young person on Saturday, April 4, after 2 o'clock in the afternoon,	- -	1 9 0	Withdrawn on payment of costs.
"	" "	" "	Employing a young person on Saturday, April 4, after 2 o'clock in the afternoon.	- -		
			Informations laid by Mr. Buller.			
Feb. 15	John Vicary, Iron Founder, Princes Road, Exeter.	John Trehane, W. Geachsias, Wm. Kendall, W. Toombs, and J. Damerel, Esqrs., Guildhall, Exeter.	Obstructing the sub-inspector in the discharge of his duty, by refusing him permission to enter the factory.	- -	0 9 0	Withdrawn on defendant's paying costs, and complying with the requirements of the Act.
"	" "	" "	Obstructing the sub-inspector in the discharge of his duty, by refusing to produce the register and certificate book.	- -		
			Informations laid by Commander May, R.N.			
1867. Dec. 17	Charles Ansley Burslem -	J. E. Davis, Esq., Stipendiary, Burslem.	Allowing his child, under 13 years of age, to be employed before noon and after 1 p.m. on the same day.	0 5 0	—	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
			Informations laid by Commander May, R.N.—cont.	£ s. d.	£ s. d.	
1867. Dec. 19	Mary Stack, Tunstall -	J. E. Davis, Esq., Stipendiary, Tunstall.	Neglecting to send her child to school - -	0 5 0	—	
1868. Jan. 15	S. Bridgwood & Sons, Longton.	J. E. Davis, Esq., Stipendiary, James Glover, Esq., and Dr. Goddard, Longton.	Employing a child without registering his name -	2 0 0	0 13 6	The penalty was imposed on the workman who was the immediate employer of the child.
,,	,, ,,	,, ,,	Employing a child without a school certificate -	1 0 0	0 17 0	
,,	,, ,,	,, ,,	Employing a child without a school certificate -	- -	- -	Dismissed.
,,	,, ,,	,, ,,	Not keeping an alphabetical index of young persons	- -	- -	Dismissed.
Feb. 6	John Daniells, Tunstall -	J. E. Davis, Esq., Stipendiary, Tunstall.	Employing a young person during the dinner time	1 0 0	—	
Feb. 21	William Bethell, Fenton -	J. E. Davis, Esq., Stipendiary, Fenton.	Employing a young person during the night -	2 0 0	0 11 0	
,,	,, ,,	,, ,,	Employing a young person during the night -	- -	- -	Withdrawn.
,,	William Moore, Fenton -	,, ,,	Employing a young person during the night -	2 0 0	0 11 0	
,,	,, ,,	,, ,,	Employing a young person during the night -	- -	- -	Withdrawn.
,,	Mary Hilditch, Fenton -	,, ,,	Allowing her child to be employed during the night.	0 5 0	0 11 0	
,,	,, ,,	,, ,,	Allowing her child to be employed during the night.	- -	- -	Withdrawn.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1868.			*Informations laid by Commander May, R.N.*—cont.	£ s. d.	£ s. d.	
Feb. 21	John Higgins, Fenton -	J. E. Davis, Esq., Stipendiary, Fenton.	Allowing his child to be employed during the night.	0 5 0	0 11 0	
"	" "	" "	Allowing his child to be employed during the night.	- -	- -	Withdrawn.
			Informations laid by Mr. Jones.			
Feb. 20	Samuel Hamer, Holcomb Brook, near Bury.	William Hutchinson and O. O. Walker, Esqs., Bury.	Employing a young person without a surgical certificate.	3 0 0	0 16 0	
"	" "	" "	Employing a young person without having registered the name and date of first employment.	- -	0 11 6	Withdrawn on payment of costs.
"	Heap and Hartley, Holcomb Brook, near Bury.	" "	Employing two children before noon and after one o'clock in the afternoon of the same day.	6 0 0	1 3 0	
"	" "	" "	Employing five young persons without surgical certificates.	5 0 0	3 16 0	Three cases withdrawn on payment of costs.
"	" "	" "	Employing four children without certificates of school attendance.	- -	3 6 0	Withdrawn on payment of costs.
			Information laid by Mr. Earnshaw.			
April 23	Messrs. Stothert & Co., Steam Ship Builders, Bristol.	Edward Sampson and P. W. Miles, Esqs., Lawford's Gate, Bristol.	Employing six young persons in boiler shop of factory after 6 o'clock p.m.	6 0 0	2 14 0	Penalty exacted.

Appendix No. 2.

Table No. I.—*Accidents arising from Machinery.*

Nature of Injury.	Adults.		Young Persons.		Children.		Total.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.& F.
Causing death	10	–	4	–	2	–	16	–	16
Amputation of right hand or arm	1	–	6	–	–	–	7	–	7
Amputation of left hand or arm	2	1	1	–	1	–	4	–	5
Amputation of part of right hand	9	11	15	14	3	2	27	27	54
Amputation of part of left hand	16	10	24	6	7	7	47	23	70
Amputation of any part of leg or foot	1	–	–	–	1	–	2	–	2
Fracture of limbs and bones of trunk	13	1	11	6	4	1	28	8	36
Fracture of hand or foot	13	10	13	8	6	4	32	22	54
Injuries to head and face	8	7	5	8	3	3	16	18	34
Lacerations, contusions, and other injuries not enumerated above	119	85	140	102	43	22	302	209	511
Total	192	125	219	144	70	39	481	308	789

Table No. II.—*Accidents not arising from Machinery.*

Nature of Injury.	Adults.		Young Persons.		Children.		Total.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.&F.
Causing death	9	–	1	–	1	–	11	–	11
Amputation of right hand or arm	1	–	–	–	–	–	1	–	1
Amputation of part of right hand	2	–	1	–	–	–	3	–	3
Amputation of part of left hand	3	–	1	1	–	–	4	1	5
Amputation of any part of leg or foot	1	–	1	–	–	–	2	–	2
Fracture of limbs and bones of trunk	29	3	12	–	3	1	44	4	48
Fracture of hand or foot	10	–	1	–	–	–	11	–	11
Injuries to head and face	46	4	20	1	5	–	71	5	76
Lacerations, contusions, and other injuries not enumerated above	340	11	153	17	24	–	517	28	545
Total	441	18	190	19	33	1	664	38	702
Total Number reported	633	143	409	163	103	40	1145	366	1491

LONDON:
Printed by George E. Eyre and William Spottiswoode,
Printers to the Queen's most Excellent Majesty,
For Her Majesty's Stationery Office.

REPORTS

OF THE

INSPECTORS OF FACTORIES

TO

HER MAJESTY'S PRINCIPAL SECRETARY OF STATE
FOR THE HOME DEPARTMENT

FOR THE

HALF YEAR ENDING 31ST OCTOBER 1868.

Presented to both Houses of Parliament by Command of Her Majesty.

LONDON:
PRINTED BY GEORGE E. EYRE AND WILLIAM SPOTTISWOODE,
PRINTERS TO THE QUEEN'S MOST EXCELLENT MAJESTY.
FOR HER MAJESTY'S STATIONERY OFFICE.

1869.

4093 I

REPORTS

TO THE RIGHT HON. H. A. BRUCE, M.P.

Her Majesty's Principal Secretary of State for the Home Department.

	Page
Joint Report of Inspectors for the half-year ending 31st October 1868 -	3
Report by Alexander Redgrave, Esq. ditto. ditto. - -	6
Report by Robert Baker, Esq. ditto. ditto. - -	81

Half-yearly Joint Report of the Inspectors of Factories.

Factory Inspector's Office,
10, *Whitehall,*
London, S.W., 23rd Feb. 1869.

Sir,

We have the honour to transmit herewith our reports for the six months ended the 31st October 1868.

The subjects to which our attention has been specially drawn are treated of at length in these reports; and we believe that our proceedings in reference to the administration of the Factory Acts Extension Act, 1867, have been as uniform as practicable under the varied circumstances of our different districts.

We have the honour to be,
Sir,
Your obedient servants,
Alex. Redgrave.
Robt. Baker.

The Right Hon.
H. A. Bruce, M.P.,
&c. &c. &c.

Joint Appendix.

Summary of the Total Number of Informations and Convictions and the Amount of Penalties and Costs in the Districts of the Inspectors during the Six Months ended the 31st of October 1868.

Description of Offence.	Number of Informations.	Result.			Penalties imposed.							
		Convictions.	Withdrawn on Payment of Costs.	Dismissed.	5*s*.	10*s*.	20*s*.	30*s*.	40*s*.	£3.	£5.	£20.
Allowing children and young persons to work between the fixed and traversing parts of a self-acting machine whilst in motion	1	—	1	—	—	—	—	—	—	—	—	—
Employing children and young persons without registering their names and date of first employment	25	14	11	—	—	—	7	—	7	—	—	—
Employing children and young persons without surgical certificates	34	16	18	—	—	—	5	—	11	—	—	—
Employing children before noon and after one o'clock p.m. of the same day	10	7	3	—	—	—	6	1	—	—	—	—
Employing children without school vouchers	8	7	1	—	—	—	6	1	—	—	—	—
Employing children, young persons, and females at night	9	7	2	—	—	—	—	—	7	—	—	—
Employing children, young persons, and women after six o'clock p.m.	81	50	21	10	—	—	36	12	2	—	—	—
Employing children, young persons, and women after seven o'clock p.m.	1	1	—	—	—	—	1	—	—	—	—	—
Employing young persons and women after two o'clock on Saturday	17	10	7	—	—	—	10	—	—	—	—	—
Employing young persons after half past four o'clock on Saturday	9	3	1	5	—	2	1	—	—	—	—	—
Employing young persons and women during meal hours	24	7	17	—	—	—	7	—	—	—	—	—
Employing children in the process of annealing glass	2	2	—	—	—	—	—	—	2	—	—	—
Carried forward	221	134	82	15	—	2	79	14	29	—	—	—

Joint Appendix—*continued.*

Description of Offence.	Number of Informations.	Result.			Penalties imposed.							
		Convictions.	Withdrawn on Payment of Costs.	Dismissed.	5*s.*	10*s.*	20*s.*	30*s.*	40*s.*	£3.	£5.	£20.
Brought forward -	221	134	82	15	—	2	79	14	29	—	—	—
Parents employing or conniving at the illegal employment of their children	3	2	1	—	2	—	—	—	—	—	—	—
Parents neglecting to cause their children to attend school - - - -	7	6	1	—	5	—	1	—	—	—	—	—
Neglecting to keep factory clean - - - -	5	1	4	—	—	—	—	—	—	1	—	—
Not lime washing, as required by law - -	1	1	—	—	—	—	—	—	—	1	—	—
Not producing registers, certificates, &c. - -	13	8	5	—	—	—	4	—	4	—	—	—
Not hanging up abstract of Acts, notices of hours of work, meal times, &c. -	1	1	—	—	—	—	—	—	1	—	—	—
Wilful obstruction of the sub-inspector in the execution of his office -	6	5	—	1	—	—	—	—	—	5	—	—
Total - -	257	148	93	16	7	2	84	14	34	7	—	—

The total amount of fines inflicted, £196 15*s.*
The total amount of costs, £123 13*s.* 3*d.*

Half Yearly Report of Alexander Redgrave, Esq., for the six months ended the 31st of October 1868.

Factory Inspectors' Office, 10, *Whitehall*,
Sir, *London, S.W.*, 31*st January* 1868.

I have to report to you a continuance of the observance of the factory regulations throughout my district during the period embraced by this Report.

It has been most gratifying to find how steadily the good feeling and co-operation is increasing in every class of works; how readily the factory regulations are observed, and how few the instances are in which it has been necessary to prosecute.

The appendix, as usual, contains the names of the persons summoned, and of which the following is a summary:—

Nature of the Charges.	No. of Firms proceeded against.	No. of Cases.	Conviction.	Withdrawn on Payment of Costs.	Dismissed.
Employing children, young persons, and females longer than allowed -	13	76	40	25	11
Employing children without obtaining certificates of their attendance at school - - - - - -	2	8	6	2	—
A parent employing a child under seven - - - - - -	1	1	1	—	—
A parent not sending a child to school - - - - - -	1	1	1		
Obstructing a Sub-Inspector - - -	3	3	2	—	1
Employing young persons without surgical certificates - - - -	—	3	2	1	—
	20	92	52	28	12

There were thus only 20 manufacturers in the whole of my district against whom I felt myself called upon to take legal proceedings, and these 20 persons are distributed in the following proportions in the different classes of works:—

There are in my district 5396 occupiers of factories under the Acts of 1833 and 1844, and only 16 of these have been prosecuted during the entire half year; of 174 occupiers of Printworks, only one; of 726 occupiers of bleaching, dyeing, and finishing works only one; of 264 occupiers of lace factories, none; of 1176 occupiers under the Act of 1864, none; and of the 7580 occupiers of works under the Act of 1867, only three; and one of these latter cases, Messrs. Palmer and Co., of the Jarrow works, was for the purpose of obtaining the opinion of the Court of Queen's Bench upon a point of law.

There has been a much larger number of accidents reported from works under the Acts of 1867 than in the

previous half-year, owing to the regulations having become better known and more attended to. The following is a list of the kinds of works in which the accidents occurred:—

Cotton factories	557
Machine and engineers' shops	513
Iron mills	495
Shipbuilding yards	202
Woollen mills	194
Foundries	157
Flax mills	130
Worsted mills	118
Paper mills	72
Steel works	53
Blast furnaces	46
Chemical works	45
Carriage factories	29
Bleaching and dyeing works	23
Silk factories	19
Printers and bookbinders	18
Glass factories	15
Mustard and starch factories	13
Other works	90
	2,789

I can only repeat what I have already stated in my last Report, that the large proportion of these Reports are useless. Of the 2,789 accidents above one half, 1,412, were not caused by machinery, and of the remainder a very great number were purely accidental.

The Report of Mr. Walker, Assistant Inspector of Factories, Appendix No. 1, contains some very interesting observations upon the state of education in his district. He alludes to the lamentable condition, educationally, of the workers in the factories in Scotland, and he has compared that condition with what he found in the north of England. The figures which Mr. Walker gives are of very great significance in many important points of view; and in none more so, perhaps, than as showing the influence of the half-time system. Mr. Walker contrasts places in Scotland, where the half-time system barely has existence, with places in England where it has become ingrained with the habits of the people. The very high position in the comparison taken by Leeds, Rochdale, and Blackburn, proves what has been effected by the half-time system. In the last-named town the results are very remarkable; and there is, perhaps, no town in the kingdom

which is so essentially a half-time town as Blackburn. There are few works but cotton factories; nearly the only employment for children is the cotton manufacture, and thus we have the results of the half-time system when it is supported and fostered alike by manufacturers, school managers, and operatives. While in Edinburgh only 46 per cent. of the children examined could read and write, the per-centage in Leeds was 67, in Rochdale 66, and in Blackburn 76.

When I had to consider the arrangements which would be necessary for administering the Act of 1867 in the Metropolis, I was very fortunate in being able to place in London three very excellent Sub-Inspectors. So much was to be done by way of explanation to employers, many of whom only knew of a Factory Act as having reference to cotton factories in Lancashire, and who comprehended with difficulty its application to employments such as mantle-making, artificial flower making, the City warehouses, &c., that it was of the greatest importance that the administrators of the law should be men of great discretion, great evenness of temper, and patient in listening to objections; and the three gentlemen now superintending the Metropolis possess all these qualifications in a high degree.

Mr. Henderson, who, in the beginning of 1868, had charge of all the Metropolis north of the Thames, and had to explain the Factory Regulations to all the trades in that part of London, has addressed to me the following Report of much interest, showing where the regulations still press upon some industries, and, what I think of considerable importance, that the modifications granted to certain trades by direct enactment have not been in excess of what the actual exigencies of the trades required.

"The application of legal restrictions and regulations to the dense population employed in the several trades and manufactures carried on in the Metropolis has been accompanied with some interesting and noteworthy circumstances. In December 1867 you did me the honour to appoint me Sub-Inspector of the Central Metropolitan sub-division, which at that time included the county of Middlesex. During the greater portion of the year 1868 I was closely engaged in visiting and inspecting the numerous factories situated within that county and in the city of London to which the new law applied. The Factory Acts passed previous to the year 1864 included but a small number of people in London, and their influence was not felt to any appreciable extent. In that year they were extended to the manufactures of earthenware, of lucifer matches, of percussion caps, of cartridges, and to the employments of paper staining and of fustian cutting. Several hundreds of operatives additional were and continue to be engaged at these employments, but after all they

constitute but a small proportion of the large number engaged in the miscellaneous trades and occupations which continued to be carried on free of any legal restriction.

"The Factory Acts Extension Act, 1867, and the Workshops Regulation Act of the same year, introduced quite a new state of things. Doubtless, when their influence comes to be more fully felt, they will create an important change in the social and industrial condition of those who earn their bread in London by labouring from day to day. The trades and occupations embraced by the new Factory Act, which give employment to the largest numbers of people in the Metropolis, include, among others, the following :

"Iron foundries, copper foundries, brass foundries, and other places in which the process of casting or founding metal is carried on :

"The manufacture, by aid of any mechanical power, of machinery, or of other articles of metal, or of india-rubber, or gutta-percha :

"The manufactures of paper, glass, and tobacco, and the processes of letter-press printing and bookbinding.

"The new Factory Act also applies to all premises, whether adjoining or separate, which constitute one trade establishment, and in which 50 or more persons are employed. Under this clause a large number of places in which an endless variety of manufactures are carried on are embraced. Among the most important are the large establishments in which wearing apparel of various descriptions is manufactured.

"But little or no difficulty has been felt in applying the Factory Acts to the metal trades in London. In the iron and brass foundries, and in the machine shops, the employment of young persons is exceptional, and they are all but universally apprentices who are above 13 years of age. In the typefounding and sterotype-casting establishments, more especially in the former, it has been the practice to employ younger boys. Several of the processes carried on in these trades afford suitable employment for children. To become quick and expert at the work, however, they require some training ; and as but few of them are apprenticed to the trade, they are generally withdrawn from it by their parents at an early age and sent to other employments. Some typefounders have expressed a fear to me that they will have a difficulty in getting boys to suit them under these circumstances, particularly when the minimum age for a full-timer is raised to 13, as it will be in July 1870. Any inconvenience that might be felt from this cause might be fairly and readily met in this trade by adopting the half-time system. So far as I can judge there does not appear to be any practical obstacle in the way.

"The number of people employed in the county of Middlesex in the manufacture of articles made of india-rubber or of gutta-percha, or in the making of paper, or in glass blowing, is not great, and the application of the Factory Act to these branches of business has made no material alteration in the mode of conducting them.

"Many females and young persons are employed in the manufacture of tobacco and cigars. The average hours of work in this trade, as a rule, have been light, but occasionally irregular; and, with the one exception which I am about to explain, the enforcement of factory hours has caused no inconvenience. In the East end of London the manufacture of cigars is largely prosecuted by persons professing the Jewish religion, and before the Factory Act was applied to the cigar manufacture it was their common practice to employ females and young persons on Sunday mornings for a few hours. All Sunday work of this kind is forbidden by the Factory Acts Extension Act, and although it is true that persons of the Jewish persuasion have the right to employ females and young persons on Saturday evenings from four till nine o'clock, yet I am assured by many employers in the cigar trade that this modification is altogether valueless and insufficient. They tell me that it is not practicable for them to get such persons to work on Saturday, and as they break off from their week's labour on Friday afternoon, the effect of the restrictions now imposed upon their trade is to reduce the week's work to four days and a half. Nor is this serious reduction in the hours of work the sole objection they make to the operation of the Act. They explain that if the girls and young persons engaged in cigar making were allowed to play from Friday afternoon till Monday morning each week they would be so stiff and clumsy in manipulating the tobacco on the latter day that the work they produced would be necessarily of a very inferior quality.

"In the processes of letter-press printing and bookbinding a very large number of people are engaged within the limits of the subdivision of which I had the care in the year 1868. The application of the Factory Acts to these occupations has perhaps as seriously interfered with the old established order of things as any that I could name. The modifications granted to bookbinders under the Act, more especially the permission given them to employ females for seventy hours a week for a certain portion of the year, have no doubt removed many of the difficulties which the new regulations if adhered to to the letter, would have created. The excessive night work occasionally indulged in in this branch of business has been effectually checked, and many employers who are largely engaged in it express the opinion that they are now little inconvenienced by the application of the Act. The process of bookbinding, however, embraces within it the folding and stitching of newspapers and periodicals; and prior to last year this was done by females, who were generally employed at it for one or two nights a week. They were not engaged at the occupation during the day. Not unfrequently they were married women, who in this way helped to eke out the weekly income of the family. The enforcement of the Act has resulted in the discharge of many such persons from employment. Some of the work is now done during the day, and in other cases folding machines have been introduced.

"The various modifications granted to letter-press printers have also met to a large degree the particular exigencies of that

trade. In large establishments but little inconvenience has been felt, and the Act may be conformed with in such places without any difficulty. Its application in some cases, perhaps in most, may have rendered the process of printing during the night a little more costly than it was before, but here, as in bookbinding, the introduction of improved machinery is dispensing with the employment of many of those who are forbidden to work during the night. The absolute and imperative nature of the restrictions imposed upon letter-press printers by the Factory Act is more grievously felt by those who are termed in the trade "jobbing printers." The latter may be numbered by the hundred in the district, and, as a rule, they are small employers, frequently having not more than one or two boys in their establishment. In such offices it is not often that the young persons are employed continuously for many consecutive hours, and they have generally many intervals of rest. The master however is frequently called upon suddenly to print a circular or a hand bill, and it is a very general subject of complaint in the trade that they are absolutely prevented from employing a boy after 8 p.m. The Act does enable them to employ young persons of fourteen years of age during the night, but they must have as holidays both the day before and the day after such employment. To the "jobbing" printer this modification affords no relief, as he seldom or ever knows till within an hour or two of the close of the day's work when he is likely to require a boy after 8 p.m. Many letter-press printers of this class have explained to me that they would be quite satisfied with some such modification of the Act in their favour as has been extended to bookbinders, and which would enable them occasionally to employ young persons an hour or two latter in the evening. From all I can learn it appears to have been the custom of the trade before the Factory Act was extended to it to do this, and to grant to the boys so employed, an equal interval of time at least, for leisure on the following day.

The Factory Acts Extension Act and the Workshop Regulation Act affect more or less every handicraft pursued in the Metropolis, and the miscellaneous establishments it has been my duty to inspect and report upon have been numerous and very varied in their character. From blacking and black lead, to perfumes and the most delicate essences, from pickles to pianos, from building bricks to artificial teeth, there are few manufactures of anything largely in demand which are unrepresented on my list. To such miscellaneous trades there has been little or no difficulty in adjusting the regulations enjoined by the Factory Act. As a rule the average hours of work during the week are in these employments less than those fixed by law, and the modifications conceded by the Secretary of State have been found generally to meet the special exigencies of particular trades.

"In the manufacture of wearing apparel of various kinds, and which furnishes employment to a very large proportion of the working people of London, the application of the new law has been productive of more chequered results. This is a trade, which, through nearly all its ramifications, is essentially what is

called a "season trade." That is to say, those employed in it, whether it be the East-end slopworkers or the West-end fashionable milliners, are subject to great fluctuations, caused either by fashionable customs, or by other circumstances. For several months in each year they have little or nothing to do; in others they are not unfrequently called upon to do too much. It has been in my experience a source of almost universal complaint on the part of employers in this trade that the Factory Act makes no allowance to them for this state of things, for which it would be unreasonable to hold them responsible. They have very generally expressed to me their entire concurrence with the general tenor of the Factory Act, and they admit the necessity of some interference on the part of the Legislature to prevent the continuance of proved abuses. But they allege that they are seriously hampered and crippled in the conduct of their business by the hours of work being imperatively restricted within the same limits in their busy season as during the slack period of the year. The inconveniences thus caused are more seriously felt by some in the trade than others. In the City and Eastern district the operatives are generally paid by piece-work, and their employers not unfrequently find that their increased energy and activity enables them to produce as much work in 10 hours and a half as they beforetime spent 12 or 13 over; but in Westend establishments employers have no such advantage. There the workpeople are paid for the most part fixed wages; a considerable number of them are boarded by their employers at a heavy cost; and the latter unhesitatingly assert that the restrictions imposed upon them, in and out of season alike, will render their business unprofitable, and that they will be compelled to cause the workpeople to share in the loss. The abolition of the boarding system, and the reduction of all they employ to the position of day workers, is contemplated by many employers; and their movement in this direction has seriously alarmed many who take a warm interest in the social welfare of the young women employed in such establishments. In the great majority of the millinery and dressmaking houses of the West-end, the comfort and health of the employees have, of late years more especially, been anxiously studied, and many employers have expended large sums of money in order to meet their various tastes and wants. The same accommodation could only be secured in private lodgings on payment of a rent which would be altogether out of proportion to the salary obtained.

"The facts thus briefly stated relative to the influence of the new law upon the young women employed in the West-end of London are amply confirmed by the lady superintendents of the various homes and institutions established for their benefit. Miss O'Neile, of the Home, 82, New Bond Street, while admitting that the Factory Act and the Workshops Regulation Act have together proved very beneficial in suppressing the excessive hours of work formerly resorted to by many employers, is quite of opinion that, for the interests of the young women employed, some modification should be made in the restrictions now laid

upon employers during the busy season of the year. Miss O'Neile states without hesitation that in her opinion the reduction of all those employed in the millinery and dressmaking to the condition of day workers would seriously injure the social status of a large proportion of them, and asserts that an extension of the hours of work during the busy season is as much desired by the young women themselves as by their employers. Miss Bramwell, the superintendent of the home in Great Marlborough Street (in which 80 young women on an average find a home), was equally strong in her condemnation of the enforcement of the law as it now stands. So unpopular are some of the regulations with those who are under Miss Bramwell's care at this institution, that she assured me they proposed to have a public meeting to memorialize Parliament against them. Miss Baldwin, of the West Central London Institute, Great Ormond Street, confirmed the opinion of the two ladies I have already quoted in every particular. Some of the young women who are members of the institution she superintends are employed in bookbinding establishments in which females and young persons are permitted by the Act to work at times 70 hours a week. When they come to compare notes with other members of the institute who are employed at millinery or dressmaking, the restrictions imposed at all times on the latter are very much condemned.

"In the course of the various conversations I have had with employers engaged in the manufacture of wearing apparel in London, I have found, almost without exception, that they would be satisfied with a moderate modification of the existing restrictions. The "season" extends over a period of about four months in each year. In the City and in the eastern and northern districts it is usually divided between the spring and the autumn; in the West-end it is chiefly confined to the late spring and early summer months. Were permission given to all employers in this trade to keep the females and young persons in their establishments at work for 70 hours a week for four months in the year, I think the difficulties now felt would be removed, and all would be reconciled to the application of the law.

"A very general opposition has been offered by employers in every branch of trade in the Metropolis to the requirement enforced upon them by the Factory Act, to obtain surgical certificates for the young persons whom they employ. The memorandum you issued in September on this subject modified the most objectionable feature of this regulation, by reducing the cost of such certificates to those who employed only a limited number under 16 years of age. There is throughout London, however, such an abundant supply of juvenile labour, that employers have a most ample choice, and the young persons they select are strong and healthy, and invariably quite qualified for their work in this respect. The Factory Act now applies also to many trades in which no young persons are employed, but apprentices of 14 or 15 years of age. There certainly does not exist the same necessity for a surgical certificate in such cases as in large factories, into which all comers are made welcome.

The substitution of the certificate of the real age of a child or young person for the present surgical certificate would be much more simple, and would certainly be more satisfactory to a large number of employers of this class.

"One of the most notable features manifested by the application of the Factory Acts to the London trades and manufactures is the fact that up to this time they have proved utterly valueless as educational measures. Children under 12 years of age do not appear ever to have been employed to any large extent in what may be termed the factories or workshops of London; and the result of the enforcement of the Factory Act has simply been this,—that in such cases when children of that age have been employed they have been dismissed, and their places have been filled up with others who are over 12 years of age. With one solitary exception I am not aware of any children attending school under the Factory Acts Extension Act, 1867, in my sub-division. Employers have made no effort to adopt the half-time or educational system, simply because they can get as many young persons over 12 years of age as they choose to employ. So long as this continues to be the case the educational clauses of the Factory Act will not have the slightest influence on the population of London. In some of the branches of trade carried on in private houses many young children are without doubt employed. In the Bethnal Green and Spitalfields districts, for example, there are many hundreds engaged in the manufacture of lucifer match and other small boxes, and in other light occupations. To these the Workshops Regulation Act applies; but it is easy to understand that its introduction and enforcement in such places as the houses of the poor in Bethnal Green and Spitalfields are surrounded with many difficulties. The extreme wretchedness and misery in which a large portion of the population of these districts are steeped present in the meantime insuperable barriers to the successful application of any educational measure. I have visited a considerable number of houses in the East-end in which very young children are employed in some of these light handicrafts; and in the great majority of them it was evident that there was but a doubtful battle going on between the inmates, and hunger and starvation. Six, eight, and occasionally more persons sleep, work, and eat in apartments but a few feet square; and it is clear that some other beneficial social measures must be associated with the Factory Acts ere they can prudently or successfully be applied to this the lowest stratum of industrial life in London.

"It only remains for me to add that in the discharge of my duty in explaining and administering the new Factory Act to the employers of labour in the Metropolis, I have, with rare exceptions, been received most kindly and courteously."

Naturally, the principal work of the half-year has been the putting into operation the Factory Act of 1867. This duty has been rendered much more onerous and much more responsible, not only from the immense number of works

brought under inspection by the Act, but because of the necessity which exists for the most careful and impartial consideration of the claims to modifications of the Factory Regulations.

The operation of some of these modifications ceases at a fixed date; that of others affects certain trades permanently, but there remain a large number of modifications which may be granted if the Secretary of State is satisfied that the customs or the exigencies of a trade require them. These terms may admit of a wide interpretation. Although it is not said by any of the regulations that the views and wishes of the employed are to form an element in the consideration of an application, yet whenever they have expressed their views I have given them the most attentive consideration. I have, however, found that, as a rule, the regulations which the masters have wished to adopt have been in accordance with the wishes of the workpeople, and in fact have been made because the exigencies exist in the customs of the workpeople.

It has always appeared to me that the Acts of Parliament should in every possible circumstance state clearly the rules to be observed, and that as little as possible should be left to the discretion of the Inspector. Every manufacturer ought to feel perfectly satisfied that the restrictions upon the labour of his "hands" should be neither more nor less than those upon his competitors, and he ought to be cognizant of what his competitors are able to do and are doing. This was the case under the Factory Act of 1844, which repealed all those regulations which depended upon the discretion of an Inspector, and laid down absolutely the regulations to be observed. If it had been possible I should have wished that the Act of 1867 had laid down rules providing for the exigencies of the various trades, which, in the demands of the public and the habits of the workpeople, require a handling so different from that which is suitable for labour in a cotton, woollen, or flax factory. But as this could not be laid down in an Act of Parliament, much has been left to the discretion of the Secretary of State, guided by the facts brought before him by the Inspector. And in making my recommendations to the Secretary of State for his permission for modifications in favour of various trades, I have been impressed with the importance of acting upon a general principle, and of consulting the opinions and experience of gentlemen thoroughly conversant with the customs and exigencies of trade, and who from their position command weight and the confidence of their fellow townsmen. I

have accordingly conferred with the Chambers of Commerce in those towns where the trades coming under inspection were represented; and I have to express my acknowledgments in particular to the Chambers of Commerce of Leeds, Halifax, Bradford, Sheffield, Newcastle-on-Tyne and Gateshead, and Nottingham, for the interest manifested in the operation of the Acts of 1867, which greatly assisted me in the administration of the law. From the Chambers of Commerce of Newcastle-on-Tyne and Gateshead, of Leeds, of Nottingham, and of Sheffield, I received recommendations for modifications to be granted to the trades in those towns, which the Secretary of State was pleased to grant, and which I believe to have been absolutely necessary for the conduct of the trades, and to meet the wishes of the workpeople.

Two kinds of orders have been granted: those applicable to a trade generally, and those applicable to a particular firm. In order that there should be open to every individual trader the means of ascertaining what modifications have been granted to any competitor, and to secure uniformity of action, the Act of Parliament directs that every order shall be advertised in the London Gazette, or otherwise published as the Secretary of State may think fit; and every order has been, under the instructions of the Secretary of State, published in the London Gazette, and every member of my staff has been supplied with copies of the orders relating to his subdivision. That the information contained in these orders has been serviceable to the public is proved by the publicity given to them in the principal Scotch newspapers.

Thus the Sub-Inspectors are in a position to communicate to any one desiring information as to the class of works and individuals to whom modifications have been granted.

In recommending the orders granted to trades generally, locally, or individually, I have been guided by the experience I had of the progress of the Factories Acts Extension Act, 1867, and of the Workshops Regulation Act, 1867, through the Houses of Parliament, with the desire of fulfilling the actual objects aimed at by the framers of the various modifications which it is in the power of the Secretary of State to grant.

My colleague and I were instructed by the Secretary of State in April last to consider under what circumstances it would be fitting to grant modifications in both districts. The conclusions at which we arrived were approved by him.

We agreed that the Acts intended, as a principle, that all manufacturing districts should work from 6 a.m. to 6 p.m., unless for a very special cause:

That the very special cause might be the particular customs of a district which do not affect other districts, or some peculiarity in the manufacture which would make a rigid adherence to the original factory hours inconvenient and likely to interfere with the course of trade;

That no modification should be granted unless it were unobjectionable as regards the employer, and that it could not be prejudicial to the health and comfort of the workpeople;

That while it was difficult to name, at length, the trades in which modifications are desirable in both our districts, we specified the following as trades to which modifications would be generally applicable:

Paper mills.
All trades dealing with molten metal, or glass.
Newspaper printing offices.
Shops and warehouses in which the persons employed are of a higher class than factory operatives.

The hours of work in the factory districts are from 6 a.m. to 6 p.m.

These hours, suitable as they are in Lancashire and Yorkshire, and in various manufacturing localities, are no less repugnant to the habits and wishes of operatives in other trades and in other towns; and among the first kinds of applications I received were those for permission to work from 7 a.m. to 7 p.m., or from 8 a.m. to 8 p.m.

The working from 7 a.m. to 7 p.m. is not a new principle.

By the Act of 1850, every manufacturer (and all manufacturers under the Act of 1867 are also included) has the absolute right to work from 7 a.m. to 7 p.m. between the 1st October and the 1st April following.

No authority from the Secretary of State or from the Inspector is required, but simply a form of notice obtained from the Inspector or Sub-Inspector must be exhibited in the works.

The modification for working from 7 a.m. to 7 p.m. in the works under the Acts of 1867, is therefore only for the summer months; but when employers have satisfied me that the customs or exigencies of the trades required the hours to be from 8 a.m. to 8 p.m., the modification has been for the whole year.

At the recommendation of Chambers of Commerce, and on the representations from deputations of trade associations, of individual members of trades, and of the members of my staff, the permission to work from 7 a.m. to 7 p.m., or from

8 a.m. to 8 p.m., has been published in the London Gazette for the following trades :

Orders applicable to all parts of my district :—
- Newspaper offices.
- Blast furnaces and places where metal is molten.
- Glass works.
- Iron and copper mills.
- Foundries.
- Premises wherein any articles of wearing apparel are made.

Applicable to the Metropolis :—
- The letter-press printers.
- Bookbinders.
- Artificial florists.
- Tobacco manufacturers.
- Warehouses.

Applicable to Sheffield :—
- The silver-plate trade.
- Britannia metal trade.
- German silver trade.
- Incorporated trades of the Cutlers Company of Hallamshire.

Applicable to Nottingham :—
- The lace warehouses.
- Hosiery warehouses.
- Letter-press printers.
- Bookbinders.
- Lace dressers.

Applicable to Leeds :—
- The clothing establishments.
- Cap-making establishments.
- Curriers establishments.
- Boot and shoe making establishments.

Applicable to Newcastle-on-Tyne :—
- The hat and cap and hat and fur establishments.

Applicable to Edinburgh and Leith :—
- The tobacco manufacturing establishments.

Applicable to Halifax :—
- The letter-press printers.
- Bookbinders.
- Tobacco manufacturing establishments.

The letter-press printers of Maldon, Selkirk, and Oldham.

Permission has also been granted to individual establishments in different parts of my district in which it has been shown that the customs or exigencies of the trades required the modifications; also, these modifications—granted to the trades and upon the principles approved by the Secretary of State—with the names and addresses of the persons to whom they are granted, being advertised in the London Gazette. In fact, no order, I believe, would be legal unless "advertised" in some such public document.

The necessity for granting permission to work from 8 a.m. to 8 p.m. to many of the establishments in large towns exists from such having been from time immemorial the customary working hours, and from there being other establishments in the same trades which are under the Workshops Act, and have therefore the option of continuing the custom of the trade. If it were insisted upon in Sheffield and Nottingham, for instance, that the larger establishments should work from six to six, while the smaller ones could work from eight to eight or nine to nine, the larger establishments would be under great disadvantages, because the better class of hands, respectable married women, and others unmarried, prefer those places where they are not required to begin at six. When sudden orders are received the manufacturers who commence at 8 a.m. are much more certain of their full ten hours and a half of work than those manufacturers in whose establishments the work begins at 6 a.m. In the establishments of the latter, the customs of the trade and the habits of the people prevent an equal regularity and punctuality. Feeling that uniformity of working is essential to a just administration of the law, I have endeavoured to obtain this uniformity for all establishments in which the occupations are precisely the same in establishments whether under the Factory Acts or under the Workshops Acts.

Up to the 31st December last, it was legal to work until 4.30 p.m. on Saturday afternoon, but after that date 2 p.m. was the normal time for closing on Saturdays. A great difficulty would have been caused in a great variety of occupations in which work never commenced before 8 a.m. if it had been absolutely compulsory to close at 2 p.m. on Saturdays. There would have been a loss, both to employers and employed, of two hours per week; but the modification which allows work to be continued until 4 p.m. on Saturdays, when work does not commence until 8 a.m., has been a great boon in every part of my district, especially as the grant of the modification to work

from 8 a.m. to 8 p.m. includes the power to work until 4 p.m. on Saturdays.

I believe there is a strong desire on the part of the masters in every trade to close as early as possible on Saturdays; but it is a very serious thing, by the rude interposition of an Act of Parliament, to disarrange trade customs and contracts; and I hope to see the full development of the Saturday half-holiday arrived at by the mutual consent of masters and men. I feel persuaded that we shall arrive at the extension of the half-holiday much more quickly by a conciliatory administration of the law, by making some slight legal concession to the present exigencies, than by adhering to the rigid dictum of an Act of Parliament. There are some trades, however, wherein the close restrictions of the Factory Acts would cause the very greatest inconvenience to the public. Occasionally it is of great importance that another day should be substituted for the Saturday half-holiday; for instance, in newspaper offices, in printing and bookbinding shops where periodicals and railway guides are printed and bound, and in milliners and dressmakers establishments. I found, also, that the closing of shops at 2 p.m. on Saturdays in towns in which the market day was Saturday would have been very inconvenient to the public as well as the shopkeepers. Therefore general orders have been signed authorizing the substitution of another day for the Saturday half-holiday by the letter-press printers of the Metropolis and Edinburgh, and in all factories in connection with retail shops in which any article of wearing apparel is made, or in towns in which the market day is Saturday.

The principle that when the market day was Saturday another day should be substituted for the half-holiday, was agreed upon by the inspectors, and approved by the Secretary of State, upon the memorial from Kendal in May last, and I have considered it very important that the same principle should be extended to other towns.

This modification, though apparently interfering with the Saturday half-holiday, will in practice only be required for a portion of the persons employed. It is a permission that may or may not be acted upon as the exigency may arise. In the establishments of milliners and dressmakers, the principals have stated to me that they do not require the whole of their young persons on a Saturday afternoon, but that only occasionally, upon a sudden order being received, some are required to remain late on a Saturday afternoon. Again, at many drapers and sellers of ready-made articles, they do not, as a rule, wish the whole of their

establishment to remain after the regular hours on Saturday, but only two or three to make alterations, &c. to articles purchased on Saturday afternoon.

These things are more important in towns in which the market day is Saturday, and have caused a good deal of anxiety in many towns. In Halifax, for instance, a public meeting was held to consider the question of the Saturday half-holiday, under the auspices of the Association for Promoting the Early Closing of Shops; and it was resolved by the meeting that, as Saturday was the market day, and the town was crowded with people from the surroundin districts, who came in after the closing of the factories a 2 p.m. to make their purchases, the holiday for the shops in the town should be Friday; and that arrangement is being now acted upon under the authority of an order of the Secretary of State.

Very strong objections were made to the constant visitations of the certifying surgeons; and I had applications from the letter-press printers of the Metropolis and of Edinburgh for the authority of the Secretary of State to dispense with the re-examination of hands by the certifying surgeon upon their changing from one employer to another.

This I considered a most reasonable application, and it was granted to that trade in these two cities. The memorandum, however, which I issued upon the subject of surgeons' fees and visits has removed many of the objections, and I have not had any other applications.

The letter-press printers of the Metropolis represented the great inconvenience that would be caused were their premises to be entirely closed on the eight half-holidays which are required to be given annually. They stated that holidays are invariably given, but that they are given only to a few persons at a time, at periods of the year convenient to the employers and the employed; and believing that this was a case which the modification was intended to meet, I recommended that it should be granted.

The only other general order which has been issued under the Factory Act, 1867, is applicable to oil and seed crushing mills.

In many of these it has been the custom to work through the night with two sets of hands; and, at the time of the passing of the Act, a portion of the hands were young, and very great inconvenience would have been caused if it had been compulsory for all under 18 years of age to be restricted to the day times. It appeared to me that in this employment there were the same grounds for consideration as in paper mills and foundries, iron mills, &c.; and I have recommended

that in those trades it might be permitted to employ male young persons of at least 16 years of age, in the same manner as male adults, until the 1st July 1870.

As some modifications have been granted to establishments which are factories under the Factory Act, 1867, it appeared to me to be just that, in establishments of precisely the same kind which are under the Workshops Act, 1867, similar modifications should be granted, especially as I had received applications from the occupiers of many such workshops, urging the necessity of the granting to them the modifications which were applicable to the larger establishments; and the following general orders have been, as in the case of factories, duly advertized in the London Gazette:—

To oil and seed crushing mills (in which less than 50 persons are employed)—

Male young persons of at least 16 years of age may be employed as male adults until 1 July 1870.

To all workshops in which the hours of work are from 7 a.m. to 7 p.m., or from 8 a.m. to 8 p.m.—

When work commences at 7 a.m. it may continue until 3 p.m. on Saturdays; when work commences at 8 a.m. it may continue until 4 p.m. on Saturdays.

To workshops in connection with retail shops in which articles of wearing apparel are made, or in towns in which the market day is Saturday—

Authority to substitute another day for the Saturday half-holiday.

There have been other orders applicable to individual workshops also advertized in the London Gazette; and in all cases copies of the notices have been forwarded to the local authorities, that all parties interested may be made acquainted with whatever modifications have been granted.

The extension of the factory regulations to such a vast variety of occupations has brought more forcibly under my consideration than heretofore the peculiarity of many of the technical rules to be observed in factories, from their inapplicability to many of the trades now under inspection, and from their producing in the minds of those who are required to observe them a feeling of irritation, which I cannot say is unnatural, because I am unable to trace, or to show to them, any advantage accruing to the persons employed from those minor technical regulations.

The object, indeed I may say the only object, of factory regulation, is the welfare of the employed. Everything that conduces to that end must be fostered and upheld. Anything that does not so conduce should be avoided, and if possible abrogated.

When the Factory Acts were passed in 1833, and for some years afterwards, there was a strong feeling in the public mind that masters were oppressors, and that the children, young persons, and women could only be protected from overwork by the most stringent regulations, binding the master to observe a variety of enactments, which were woven like a net around him, and under which he felt himself constantly liable to prosecution.

I confess I have long looked upon some of these regulations as useless to prevent what is the real practice to be prevented, viz., overtime.

Every manufacturer is required to enter in a register the name of every person employed under 18 years of age. And he is liable to a penalty of not less than two pounds for every name not so registered.

I see no important object gained when the names have been registered. In the case of young persons under 16 years of age, and in a large factory, the register of names is an assistance to the Inspector by way of reference, when ascertaining whether the proper surgical certificates have been obtained, but beyond that I consider it useless.

When an Inspector visits a factory after 6 p.m., for instance, if persons are at work he ascertains their names upon the spot, and that is sufficient for his purpose.

If a register of names can be useful, it can only be in the case of persons under the age of 13 years, viz., half-timers, for whom certificates of school attendance are required, in order to attest their proper attendance at school.

Again, the penalty for non-registration is altogether disproportionate to the extent of the particular infraction of the law. The non-entry in the register of the name of a young person,—an omission to which no injury or injustice to any person employed can be traced,—subjects the manufacturer to a penalty of not less than two pounds; while the employment of a child of six years of age, in labour utterly unsuited to its age and strength, can only be punished by a fine of not less than one pound.

I have sometimes prosecuted manufacturers for not having registered the names of persons employed by them; but I have done so only in those cases where the neglect has been part of, and allied with, a system of passive resistance to the real and cardinal points of the Ten-hours Act. For instance, where a manufacturer has employed a half-timer for full time, and the name has not been registered, I have been able with facility to increase the number of informations, and so to increase the amount of the penalty. But this might have been done with a little more trouble by other methods.

The registration of names, however, is closely allied with another regulation, which is a great annoyance to manufacturers under the Acts of 1864 and 1867, without any countervailing good to the persons employed.

I refer to the compulsory examination of all persons under the age of 16 years by a certifying surgeon, appointed by the Inspector, and paid by the manufacturer.

The law in respect to certifying surgeons is as follows:—

The Inspector appoints the certifying surgeons, and assigns districts to them.

The occupier of every factory is required to obtain from the certifying surgeon whenever he (the occupier) takes a child or young person into his employment, a certificate certifying that the age of the child is at least eight years, or of the young person at least 13 years.

When a child or young person goes to another mill, notwithstanding the patent fact of an examination having already been made and a certificate granted, a fresh examination and a fresh certificate are necessary, because the certificate of the certifying surgeon is only valid for the mill in which it was given; and it frequently happens that this same process is gone over again and again as often as the child or young person enters a fresh employment, and as a matter of course the manufacturer has to pay a fee for one oft repeated tale.

The certifying surgeon is paid by the manufacturer, upon terms agreed upon between them, but, if appealed to by the manufacturer, the Inspector is empowered to fix the visits and the fees, which then are binding.

This again, is a part of the system which, having been necessary in 1833, has been distanced by the march of events, by the enormous ameliorations of factory labour under the Factory Acts, and by the wide-spread and almost universal improvement in tone both of the employers and the employed.

In 1833 there was a general feeling that children were ruthlessly worked in factories, and the public voice demanded protection for them. First, that they should not be employed under certain ages, and, next, that they should not be employed at all unless they were quite equal to the work. There existed at that date no satisfactory system of registration of births. In the Church of England those who were baptised were registered, and the ministers of many denominations kept registers of those who were baptised according to their several rites. But in those days numbers were not baptised at all, and no means were available for ascertaining the real ages of children. The institution, therefore, of the certifying surgeons, who should examine the

children as to their age, was a most valuable suggestion, and for many years was the means of preventing the employment of very young children.

Doubtless numerous cases existed in 1833 of imperfect health, of persons who ought not to have been employed in factories, and children were found at work who were quite unequal to the strain then required from them. Up to 1833 the number of hours' labour was unrestricted; and it is not to be wondered at, if disease and debility resulted from the employment of little children of eight years of age and less, for 12 or 14 or even more hours per day. And to judge from much of the evidence of the Factories Enquiry Commissioners it was absolutely necessary to interpose some machinery by which little children should not be put to work when physically unfit for it. But a generation has passed since those days; factory children have not been overworked for years, while adolescents and women have been restricted to a moderate amount of labour. Speaking from my own experience of many years, and from the observations of the Sub-Inspectors, the number of children rejected by the certifying surgeons on the ground that they are incapacitated by disease or bodily infirmity to perform the amount of labour required has been so small as to be inappreciable. It is absurd, moreover, to suppose that manufacturers in these days desire to employ impotent children. A manufacturer rather calculates the worth of every hand he employs; and he does not employ more than are productive. No one going into a factory, and marking how the overlookers keep the boys and girls at work, can fail to see that the weak and lame would not hold their own for a day, and that an overlooker is fully alive to the necessity of engaging strong and active hands.

This has been the subject of very careful consideration and observation on my part, and the evidence is overwhelming, that children labouring under disease or debility are rarely presented to the certifying surgeons. It does not rest upon my own experience only, but has the concurrent support of all who have connection, officially or otherwise, with my factory district of Lancashire and Yorkshire.

This has been the result in cotton, woollen, worsted, flax, and silk factories, where large numbers of the youngest children are employed, and as to which the enquiries into factory labour in 1833 were confined.

In order to arrive at the real object of the surgical certificate, it is necessary to consider the enactments of the Factory Act of 1833, passed upon the Report of the Factory Commissioners, by whom the fullest evidence had been taken

upon every point in connection with the employment of women and children.

The framers of that Act most properly deemed it necessary that the little children should be examined by a medical man as to their ability to do the day's work allowed by law. The form of the certificate, which could only be granted by a qualified medical man, is set forth in the Act. But when the age of 13 was attained, and the child became qualified by age to work for full time, a medical certificate was not required, but simply a certificate in proof that the person was above 13; and if the child did not work more than nine hours a day, a certificate was not required. It is true that this certificate was practically given by the certifying surgeon in the same manner as the certificate for a child; but it is clear that the evidence upon the Factory Inquiry did not impress the framers of the Act with the feeling that young persons above 13 years of age were at all exposed to the evils which younger children suffered in Factory labour.

The employment of very young children,—I mean as young as those employed in the above description of factories,—is comparatively rare, in the various classes of works brought under inspection by the Act of 1867. We have now to deal under this Act with occupations in which lads and girls from 14 and upwards are employed: who are not driven by the greed of a parent, or the inhumanity of a master, to work constantly and habitually for shamefully long hours; but who, being nevertheless liable to be called upon at intervals for an undue exertion, are amply protected by the limitation of the hours of work.

The question of the necessity for medical certificates in these occupations, therefore, assumes an aspect as different as possible from that which it presented in 1833. Then it was necessary to have a guarantee that the little children really had the strength to work for much longer hours than children of the same age work at the present time. Now, with moderate hours of work, with greatly improved machinery, requiring fewer hands, in buildings more healthy and better suited for work, with a generation of operatives who have been protected by factory legislation, the danger to be avoided is not lest children shall be called upon to do an amount of work, to which they are physically unequal, but lest their very physical sufficiency should induce the surgeon to certify them prematurely for full time employment, and thus curtail the schooling, which their real age would have secured to them as half-timers. We desire to keep children at school for the longest possible

period, and hence we want absolutely to prevent the employment of under-aged children for full time, however strong they may be, or however much they may appear to be above the age of 13. To such children advanced physical development is, under the present system of medical certificates, a misfortune instead of an advantage.

There is nothing exhaustive in the ordinary employment of children in the works now under inspection. In some works, where the labour is light and the rooms healthy, children, indeed, who are under the regulated age, could easily work for the stipulated number of hours and perform the allotted work without injury to their physical condition; but they ought not to be withdrawn from school prematurely, and it is in order to assist in keeping them at school for the full period contemplated by the legislature that there is now a necessity for greater strictness, and for the actual proof of age, instead of the expression of an opinion.

In the fact that it is merely the expression of an opinion lies the great objection to the surgical certificate. There is no uniform standatd by which age can be judged. The reports of the Inspectors, my predecessors, will show how difficult a thing it was to attain any thing like uniformity among the certifying surgeons; and although the same differences of judgment and practice do not now exist, there is still sufficient to create difficulties, and to show the necessity for amendment, in localities where many children are employed.

Naturally every certifying surgeon acts upon his own view of what state of physical development is the best guide in enabling him to decide whether a child be eight years of age or thirteen years of age; and it constantly happens that two certifying surgeons residing in contiguous districts take different standards, and consequently there is a fertile source of annoyance among manufacturers and workpeople, because children have been accepted in one district and refused in another.

This becomes of the greatest importance when trade is brisk, and, as a matter of course when the "hands" feel their advantage.

In the district where the certifying surgeon has a low standard, or is less careful than he should be, the manufacturer obtains labour as he wants it. In the neighbouring district, where the surgeon has more discrimination, and exercises more care, the manufacturers cannot obtain all the hands they require.

When certifying surgeons in the populous parts of my district like Mr. Arden of Sheffield, Mr. Bramley of

Halifax, Dr. Massey of Nottingham, or Mr. Poppleton of Bradford, gentlemen who, with large districts, get through their work punctually, regularly, and efficiently, careful to act upon one sound principle, viz., to admit no child of doubtful appearance, without proof of age, I consider the system has worked well, in preventing the employment of children and young persons under the proper ages.

But in country towns, in small establishments, and even in large establishments, where there is no great change of hands, periodical visits are unnecessary, and there does not appear to me to be any necessity for the compulsory attendance of the certifying surgeon at the factory, for the purpose of granting certificates.

It must be remembered that the certifying surgeon, when visiting a factory for the purpose of examining hands, has no power to enter the factory, or to do any act, save and except to examine the young persons presented to him, and to grant or refuse a certificate. He has no authority at any time to enquire into the healthiness or unhealthiness of the occupations carried on in the factory, or into the condition of the factory itself; he is simply a substitute for the registrar of births, an officer who did not exist at the time of the creation of his office.

The state of factories as to ventilation and cleanliness, the healthiness of the occupation, and the prevalence or absence of disease, are matters which come under the cognizance of the provisions of the Sanitary Act, and are subject to the supervision of medical officers of health under that Act.

The Inspectors of factories have power to direct improvement in ventilation, and the carrying off of dust or noxious vapours. On these points we constantly make suggestions which are readily adopted.

All manual labour exercised by way of trade or for the purposes of gain is now under inspection, either by the provisions of the Factory Acts Extension Act, 1867, or of the Workshops Regulation Act, 1867; and this extension of the factory regulations gives the question of surgical certificates a still further prominence.

Under the Factory Acts, whenever a child or young person changes from one factory to another a fresh medical examination and a fresh certificate are necessary; while in similar but rather smaller establishments, under the Workshops Act, no such routine is required; a child or young person must be of the required age, and that fact is ascertained by the production of a certificate of birth, which certificate of birth is of course good for any number of workshops. There is thus a considerable difference in the administration of the

two Acts in precisely the same kinds of works, and it becomes very desirable that all these distinctions should cease, and that every manufacturer should be in precisely the same position as his competitors.

The system of certifying surgeons was enquired into by the committee of the House of Commons which sat in 1840–1. It was confirmed by the committee, and by the 7 Vict. c. 15, which embraced many of the recommendations of the committee. But this committee sat twenty-eight years ago, while the 7 Vict. c. 15. was passed twenty-four years since; and the system must be examined now in connection with the altered circumstances of the occupations then under consideration, and with the entirely different arrangements of the works brought under inspection by the Acts of 1864 and of 1867.

Up to 1844, the only factories under the Factory Acts were the cotton, woollen, worsted, silk, and flax mills.

Up to 1844 the legal number of hours of work of children were nine hours per day.

In 1844 the legal number of hours work for young persons were twelve per day.

In 1844 the General Registration Act had only been in operation seven years, and could not then be used.

At the present time numerous occupations are under inspection in which very young children are never employed. The Registration Act has been in force for thirty-one years, and births are now well registered in the manufacturing districts.

The hours of work for young persons have been reduced to ten and a half per day.

The hours of work of children cannot now exceed six hours and a half per day.

The physical condition of the operative classes has, from the shortening of the hours of labour, and from other causes, been greatly ameliorated, and there is not the same necessity for general medical examination of young hands under the present system.

It is impossible to close one's eyes to the facts which rise up daily and hourly, and they are of such importance that the whole question is now ripe for consideration.

These facts, and those which I have referred to, demonstrate clearly that an alteration may be made in the present system of ascertaining the ages of the persons to be employed in a factory:

That the retention of the certifying surgeon for the purpose of granting certificates of age is not necessary for the

maintenance of the factory regulations, or for preventing the employment of children unable to work:

That the actual age should be proved by the production of a certificate of birth.

I think the employment of the certifying surgeons should be optional, instead of compulsory; that manufacturers should have power to select whether the certifying surgeon should grant certificates, with the advantage of employing the hands before the certificates are granted, as at present, or that they obtain a certificate of birth for every person under the age of sixteen years.

The old system would be properly continued in all factories where a large number of children and young persons are employed, as it would be the most convenient for the manufacturers, and these are the kinds of employment where a medical opinion may be justified.

Having during the course of the year 1868 to appoint many certifying surgeons, frequently for places and towns in which there were comparatively few works under the Factory Acts, and knowing the difficulty which existed with the surgeons as to what they should charge, and with the employers as to what they should pay, I thought it advisable to distribute a memorandum upon the subject of the fees and visits of the certifying surgeons, in order to relieve both parties from their dilemma.

The following is the memorandum, dated 15th September 1868, a copy of which was sent to each certifying surgeon, and to the smaller manufacturers, who employed only a few young persons.

"Fees and Visits of the Certifying Surgeons.

"Although the Inspector is not required to fix the fees of the certifying surgeons, yet he and the Sub-Inspectors are so often appealed to upon this subject, which is of considerable importance to manufacturers, that the Inspector thinks it will facilitate arrangements if he state what in his opinion is required, and will conduce to the observance of the factory regulations.

"The frequency of the visits is a matter to be determined by the employer, but as a general rule, where the changes of hands are frequent, an arrangement should be made with the certifying surgeon for a periodical visit to the works at a certain sum per annum: this relieves the employers of the trouble of constantly writing to the certifying surgeon, and is upon the whole economical.

"In works where the changes of hands are not frequent, a periodical visit is not necessary or advisable. When a fresh hand has been taken on, the employer should send notice to the certifying surgeon, who will call at the works, and examine the young person. Looking to sec. 13 of 7 Vict., c. 15. as a guide,

the following fees (considering that no medical or surgical treatment is required from the surgeon) will be fair on both sides :—

"For a visit and one certificate. . . . . and sixpence for each certificate in addition when more than one is granted.	2*s.* 6*d.*

"When the works are more than a mile and a half from the residence of the surgeon, sixpence per half mile may be charged.

"A very large number of small works have been brought under inspection by the Act of 1867, and complaints have been made of the comparatively heavy charges for certificates in these small works, which appear to be well founded, especially as such certificates are not required in establishments under the Workshops Act, 1867 ; and the undersigned, therefore, authorizes, in works where there are never more than five persons under the age of 16 years employed, the said young persons being examined at the residence of the certifying surgeon, for which the fee is sixpence per certificate, and no more; upon condition that a responsible person takes the certificate book, and accompanies the young person to the residence of the certifying surgeon, at a time convenient to the surgeon."

The object of this memorandum was to place before the certifying surgeons and the manufacturers a suggestion for facilitating the granting of certificates, more especially amongst the manufacturers under the Act of 1867, and those smaller employers to whom the payment of the surgeon's fee is a question of pecuniary importance.

I have found in many places, that a weekly visit of the certifying surgeon has existed without the slightest necessity, and I wished to point out that a regular visit is only desirable where the changes of hands are frequent. In these cases there is rarely any difficulty between the manufacturer and the certifying surgeon in coming to a fair and reasonable settlement.

Where a periodical visit is not necessary, it has sometimes been a question as to what fee should be charged. In factories under the Act of 1844 things are pretty well settled, but in the works under the Acts of 1864 and 1867 the manufacturers have wished for a guide as to what they should pay, and I have suggested a fee, higher than would be given for a regular periodical visit, but not an extravagant one. In many parts of Lancashire and Yorkshire the fee has been less than that which I have suggested. I have no desire or intention of interfering with arrangements already agreed upon, which have hitherto been satisfactory both to the manufacturers and to the certifying surgeons. In these cases I trust that the old rates will continue, as my memorandum, up to this point, is only a suggestion, which manu-

facturers and certifying surgeons may agree to or not, as they deem fit.

But it is by means of its last paragraph that I desired to give the greatest relief to the smaller manufacturers, and to do a great deal to facilitate the observance of the factory regulations.

There are a large number of employers of one, two, or three young persons, frequently of 14 and 15 years of age, who, according to the law, must be examined by the certifying surgeon, and be certified by him to be above 13 years of age. Every time there is a change of hands, the certifying surgeon had to be sent for, the certificate to be granted, and the feeto be paid. Very young children are not employed, because the labour is unsuited for them, and they would not be worth the wages paid to them.

Looking back to the report of the committee of 1840, it will be seen that the idea of the committee was, that the fee of the certifying surgeon should be at the rate of sixpence per certificate, and that the manufacturer and the person certified should each pay half of the charge.

It is to the honour of manufacturers, that the majority of them make no deduction from the wages of the young persons towards the expense of the certificates, although they may legally deduct threepence on that account. But I cannot refrain from expressing my opinion that the expense of the certifying surgeon for granting certificates of age is one which ought not to be borne by the manufacturer. It would appear, upon strict principle, either to be an expense which should be borne by the person seeking employment, and producing the necessary qualification, or, if the matter be viewed in the light of a public means for preventing the employment of little children, and herein as being in pursuance of the promotion of an object affecting the public weal and the physical condition of a large number of persons, it should be borne by the public, in the same manner as the vaccination of children is paid for by the public as a measure affecting the public health.

Impressed with these views, desirous of diminishing as much as possible any restrictions upon industry, of distinguishing in a marked manner between that which is essential and that which is simply routine, and of lightening the pressure of a regulation which operates oppressively, and keeps in vigour a rankling feeling of opposition to those parts of the Act which are really beneficial, I have exercised the power vested in me by the Act, and I have authorized that instead of the certifying surgeon attending at the premises to examine the hands, they may be sent

to his residence, and be examined there at the rate of payment fixed by the Act, viz., for sixpence per certificate, and I have thereby relieved many from what they felt to be a heavy demand, and have changed, in many cases, a smouldering discontent into hearty support of the law.

Although a very short time only has elapsed since the issue of the memorandum, and it has not come into full operation, yet there is a sufficient amount of evidence of its advantages to show that this alteration has been most beneficial. I have requested the members of my staff to give me the result of their experience, of their every day observation, and their evidence is, I think, conclusive upon the subject.

Mr. Walker, the Assistant Inspector for the Northern District and Scotland, says:—

"Since I received the memorandum allowing surgeons to examine at their own houses children and young persons working in factories where only a limited number are employed, I have not visited many factories of the class at which the occupiers could avail themselves of this permission; but I have talked over the matter with some of them; letter-press printers, for instance, upon a small scale, and they expressed themselves as favourable to the new arrangement, in so far as it enables them to comply with the law without being put to the trouble and expense of receiving periodical or other visits from the certifying surgeons, which, in the case of small factories, they consider to be quite unnecessary and uncalled for."

Mr. Coles, the Sub-Inspector for Salford, Pendleton, Bury, &c., gives his experience as follows:—

"Your memorandum of the 15th September 1868, giving permission to the occupiers of small works to send the young persons to be examined at the house of the certifying surgeon for a fee of sixpence per certificate, has proved a great boon to the many small occupiers brought under inspection by the Extension Acts of 1864 and 1867, and by enabling them to have their hands "passed" at so trifling a rate has taken away the inducement to evade the law which the former high fees of the certifying surgeons provoked."

Mr. Rickards, Sub-Inspector for Leeds and its neighbourhood, speaks of the certifying surgeons giving every facility for carrying out the principle of the memorandum.

"I believe the memorandum of the fees and visits of the certifying surgeons, issued by you on the 15th of September last, has been of great advantage in the administration of the Factories Acts Extension Act, 1867, and I know that the manufacturers are very glad of the permission to send the young persons to be examined at the house of the certifying surgeon. Many, I know, have availed themselves of this permission, and as a general rule

the certifying surgeons have offered them every facility for doing so."

Mr. Whymper, who has the superintendence of the Metropolis south of the Thames, with the counties of Kent, Surrey, and Sussex, reports to me thus :—

"Your memorandum of 15th September has lessened the causes which have contributed to make some manufacturers unwilling to obtain the surgical certificate for the young persons in their employment.

"Manufacturers under the Act of 1867 have availed themselves of and have expressed themselves pleased with the permission for young persons to be examined at the house of the surgeon. As, however, very far the greater number of the young persons working under that Act had already been certified, and as changes are unfrequent, the employers have hardly yet had time to appreciate all the convenience of the concession."

Mr. Oram, who has the superintendence of the eastern portions of the Metropolis, has given me his experience in the following report :—

"With reference to your enquiries as to the circular relative to the fees and visits of the certifying surgeons, I beg to inform you that it has been found exceedingly useful, and has been the means of overcoming one of the greatest difficulties in connection with the extension of the Factory Acts, viz., the obtaining certificates for young persons in the smaller works, which was felt to be a very heavy tax, the more especially as some of the surgeons impressed upon the small firms not only the advisability but the necessity of having regular visits, with of course the payment of regular fees above the amount contemplated on the passing of the Act.

"The surgeons fees interfered with the employment of young persons ; and in some cases where the visits were not regular, but the surgeon had to attend at the factory, the millowner would say to the young person, on applying for work, 'I am willing to 'take you as a learner, but although I can only deduct three-'pence from your wages according to law, I shall not employ 'you unless you agree to pay me the amount of the surgeon's 'fee ;' and it thereby became a heavy tax on the operative.

"This practice, however, I endeavoured to prevent whenever it came under my notice.

"There is no objection (except in very few cases) to the payment of a small fee similar to that paid for a certificate of birth ; and your directing attention to the section of the Act empowering certificates to be granted at the surgeon's residence under certain conditions on payment of a specified fee has been a decided boon to both employers and employed.

"A few extracts from my note book will show how unnecessary regular visits have been in some cases where they have been made.

"1. A brassfounder had three boys in his employ under 16 years of age, and he informed me that a lad generally remained in his employ five years, but he had regular visits from the surgeon as if frequent changes occurred.

"2. Firm had one young person presented for examination in the course of 22 consecutive visits.

"3. Firm had two young persons presented for examination in the course of 19 consecutive visits.

"4. Firm had five young persons presented for examination in the course of 48 consecutive visits.

"5. Firm had three young persons presented for examination in the course of 20 consecutive visits.

"6. Firm had eight young persons presented for examination in the course of 77 consecutive visits.

"7. Firm employed only one person under 16 years of age, and yet thought it was necessary to have regular visits, with a quarterly payment for the same.

"These cases will be sufficient to prove how convenient your circular has been to the Sub-Inspectors, when the question has been raised, as it so often is, as to the surgeon's visits.

"You will probably remember a letter I received from a small employer, who is himself a workman at the railway works, and remarks :—

"'There is only one thing or clause in the Act I disapprove of that is, that I hardly think it fair that I in so small a way should have to pay the doctor's fee for examination.

"'If the doctor's fee will be any less by my sending the two lads to be passed him, I will send them.'

"Another firm writes as follows : 'Is seven days the utmost time allowed for a person under 16 to be employed without being examined by the doctor. In taking on either apprentice or errand boy, it is almost impossible to tell whether they will suit, or like, or be fit for the trade in so short a time. Sometimes four or five have to be tried before both parties are suited, and to pay that number of half-crowns for liberty to employ a person of 14 or 15 is a very heavy tax.'

"Another firm, writing on the same subject, remarks :—"'In reference to the employment of lads under age, we beg to call your attention to the hardship and loss inflicted on us and all similar employers, in having to pay a medical fee of half-a-crown on the fresh and frequent change of employment of new hands, viz., from the fact of such lads continually seeking and obtaining fresh employers, and that very frequently after only two or three weeks employment in any warehouse, thus causing a continuous tax on employers, to certify for the same lad, it may be 20 or 30 times in the course of 12 months.

"'To remove this objection and unnecessary burden, we should suggest that a small fee of a nominal amount be charged, so that employers of juvenile labour may not seek to evade the payment of half-a-crown, as at present, consequent on the frequent changes in their hands, of such lads, going from warehouse to warehouse, and constantly necessitating renewed medical inspection.'

" 'In the course of conversation, the head of one firm remarked ' that the only cause of grumbling he had was that the surgeon's ' fee had to be paid, although the young person had already been ' certified at a neighbouring workshop.

" 'Another remarked that constant changes made the payments ' of the surgeon's fees heavy, and that such payment for the cer- ' tificates required was his only ground of complaint.

" 'Presuming that the certifying surgeons co-operate in car- ' rying out your suggestions, I think your circular will remove ' all difficulties in respect to the smaller works, and greatly ' facilitate the carrying out of the provisions of the Factory ' Acts."'

Mr. Henderson expresses his opinion, founded upon his observations not only in the Central Metropolitan subdivision, but in Glasgow, where he spent a short time during the absence upon leave of Mr. Campbell, and he also refers to the co-operation of the certifying surgeons:

"I have no hesitation in stating that your memorandum of the 15th September, relative to the fees and visits of certifying surgeons, has been of great advantage in my district. It has aided me materially in administering the Factory Acts, more particularly the Factory Acts Extension Act, 1867. This latter Act brought under inspection in the metropolis a very large number of employers, jobbing letter-press printers, bookbinders, machine makers, iron and brass founders, and others, who do not require to employ more than two or three young persons at a time. Your memorandum has afforded such employers much relief. Prior to its publication, the cost of certificates of age was grievously complained of to me by many. In one case I found that a poor widow, a letter-press printer, who only employed two lads to assist her, had paid 15*s.* for such certificates within a period of three months.

"I may, perhaps, be permitted to add, that while in Glasgow, in December, acting for my colleague, Mr. Campbell, I found your memorandum highly appreciated by the occupiers of factories there.

"In my subdivision of the metropolis the certifying surgeons afford every facility for granting certificates at their residences, under the conditions referred to in your memorandum. In Glasgow, the senior certifying surgeon, Dr. Fleming, to prevent employers being put to inconvenience, grants certificates in such cases at the factory, and charges only the minimum fee named in your circular."

Mr. Lakeman, who has the superintendence of Halifax and its neighbourhood, shows that the memorandum has been somewhat extensively adopted in his subdivision, and that the surgeons have much facilitated the matter by appointing a time at which the hands may be sent up to their houses:—

"In reply to your letter respecting the value of the memorandum as to the fees and visits of certifying surgeons, issued

by you on the 15th September last, in promoting a greater regard on the part of many occupiers for the Factory Acts, I have much pleasure in being able to state, that the scale of charges has been highly prized by those under the Extension Act of 1867, and by many small occupiers under the Act of 1844. In the cases brought under my notice, I have questioned occupiers. They expressed themselves more willing to comply with the law by the payment of 6*d.* than under the old system ; and I have found a readiness at all times to send any young person to the surgeon's house at the time fixed by the surgeon for such visits.

"I may mention, that although I issued very many copies of the memorandum throughout Halifax, Hebden Bridge, and Todmorden, as soon as I had received them, yet I found in Todmorden that the small occupiers had a copy of it cut from the newspapers, and fastened in the register for young persons, in the page reserved for the surgeon's signature ; they have said that as we can get a certificate for 6*d.* we will not run any risk of being caught.

"In regard to occupiers under the Act of 1867, nothing has been heard of by me but readiness to comply with the terms of your memorandum, and all of them have accepted the plan of sending young persons to the surgeon's house at the time specified by him."

Mr. Oswald, the Sub-Inspector for Derbyshire and Nottinghamshire, refers to the opposition of the certifying surgeons ; but I believe this will now subside, when it is known that the mmorandum has been approved almost universally.

"The memorandum issued on the 15th September, respecting the fees of the certifying surgeons, has given great satisfaction to the small occupiers, especially the letter-press printers. I have not heard any complaint respecting it from the manufacturers ; but the surgeons, one and all, are opposed to it, more especially to the sixpenny fee, and in cases where the hands are taken to their residences they refuse to take any fee. I shall be better able in the course of a few months to give a fuller statement."

Mr. Gould, the Sub-Inspector for Sheffield, states that it will require another six months to elapse before he will be in a position to pronounce a decided opinion ; but that the certifying surgeon, in order to facilitate the working of the Act, has agreed to charge only sixpence per certificate when calling at the smaller works.

Mr. Saurin, the Sub-Inspector for the south-eastern counties of Scotland, reports that some manufacturers have objected to the fee named in the memorandum, as being higher than that indicated in the Act ; but that the permission to send the children to the house of the certifying surgeon will prove a decided boon, especially in the tobacco trade.

Mr. Paget of Bradford, says, he has not yet had an opportunity of leaving the memorandum at all the small places in

want of them; the hands change seldom, and those requiring certificates had been passed before the issue of the circular; so that a little time must elapse before he can tell how it will work.

Mr. Chaytor, the Sub-Inspector for Newcastle and the north-eastern counties, says, that little use has been made of the memorandum as yet.

Mr. Sale, having the superintendence of Ashton-under-Lyne, Stalybridge, and Oldham, says:—

"Your memorandum as to the fees and visits of the certifying surgeons, issued on the 15th of September last, has been of the greatest advantage in the administration of the law, as regards the Act of 1867, in my subdivision, and I have no doubt that it has been most acceptable to a very large number of manufacturers who are subject to the provisions of that Act."

Mr. Cullen, the Sub-Inspector for the north-eastern counties of Scotland, shows that the memorandum has been most acceptable.

"The memorandum issued by yourself the 15th September ultimo, respecting the fees and visits of certifying surgeons, has been of decided advantage in the administration of the law, especially of the Act of 1867.

"The permission for the examination of young persons at the house of the certifying surgeons has certainly been acceptable to the manufacturers. It would be still more so if the surgeons would fix a day and hour in each week on which they would certainly be found at home for the purpose."

Mr. Osborn, whose subdivision comprises Blackburn, Burnley, Clitheroe, and their neighbourhoods, has reported to me as follows:—

"So far as I have hitherto ascertained, the new regulation permitting certificates under certain circumstances to be granted at the residence of the surgeon has given thorough satisfaction.

"The occupiers of the smaller classes of works now under inspection quite appreciate the advantage of the diminished expense. Less delay is caused to compliance with the requirements of the Act, the arrangement cuts away all ground for that commonest excuse, and fruitfullest cause and effect of negligence, inability to get the doctor to the premises.

"It is also a convenience to the certifying surgeon, and a considerable saving to him of valuable time."

Mr. Meade-King, Sub-Inspector for Manchester, having been more recently appointed, has not had as much experience as his colleagues of the working of the system, but he says:

"The permission for young persons to be examined at the house of the certifying surgeon is decidedly acceptable to those who are in a position to avail themselves of it, but I have met

with few, as yet, who have taken advantage of it. It is difficult to persuade a great number of small manufacturers that they are not unjustly taxed in this respect."

In compliance with the instructions of Mr. Secretary Hardy's letter of the 19th August last, that I should ascertain in what places the Workshop Act has been in force, and where it has been neglected in order that information upon that subject may be available for Parliament, I have the honour to submit the following report.

The Workshop Regulation Act, 1867, was passed on the 21st August 1867, and it was to come into effect on the 1st January 1868.

I stated in my report for the half-year ended the 30th April 1868, that I entered into communication with the principal local authorities of my district, in order to bring prominently to their notice the passing of the Act, and the responsibility which devolved upon them, as I was most desirous that the Factory Acts Extension Act, 1867, and the Workshop Regulation Act, 1867, should be administered concurrently, feeling it to be incumbent upon me to exercise all my influence in obtaining uniformity of hours of work in every class of trade, whether under the Factory or the Workshops Acts. My first step was to send in December 1867 a copy of the Act to the several metropolitan vestries, boards of works, the mayors and provosts of all towns in my district, and the local boards, wherever I ascertained that handicrafts were carried on, with the following circular:—

"Sir,

"Two measures of great importance were passed during the last session of Parliament, the Factory Acts Extension Act, 1867, and the Workshop Regulation Act, 1867.

"By the former of these two Acts, in conjunctiou with previous Acts, a large number of trades have been placed under restrictions as regards the labour of children, young persons and women, which restrictions are enforced by the Inspectors of Factories. These trades are the following:—cotton and other textile factories, printworks, bleaching, dyeing, and finishing works, lace, earthenware, fustian cutting, percussion cap, cartridge. lucifer match and paper staining factories, blast furnaces, copper and iron mills and foundries, the manufacture of metal, of machinery, of india-rubber and gutta percha, of paper, of glass of tobacco, letter-press printing and bookbinding; and, in addition to the above, any manual labour exercised for the purposes of gain on premises where not less than fifty persons are employed in the making or preparing or finishing any article for sale.

"By the Workshop Regulation Act, 1867, children, young persons and women employed in any manual labour on premises

other than the above are placed under regulations to be enforced by the local authority.

"I beg to enclose a copy of this Act, which I doubt not you will bring under the consideration of the body of gentlemen over whom you preside, and to offer any further information or assistance in my power."

In the early part of the present year I had authority to issue copies of an abstract of the principal regulations of the Workshop Act which had been prepared by Mr. Sub-Inspector Oram, and I sent a supply of these abstracts to every public body whom I had addressed, and also to employers, and to persons of whom I received complaints.

I had conferences with several public bodies with a view to prepare the way for the administration of the Act; especially in the metropolis, having had interviews with the officers of vestries and district boards of works.

The principal difficulty to be overcome was the disinclination to undertake duties of so novel a character, for which the local authorities would have to provide the remuneration; but in the metropolis and in the larger towns, with the exceptions which I shall notice presently, it has been felt that a public duty devolved upon the governing body which it would be proper to accept, and that action should be taken, dependent, however, upon the peculiarities of the localities.

With a view to obtain further details, I requested on the 15th September 1868 the local authorities to inform me of the progress made in their jurisdictions in administering the Act, in the following circular:—

"Sir,

"I beg to call your attention to the provisions of the 'Workshop Regulation Act, 1867.'

"This Act regulates the hours of labour in the establishments under its provisions of children, young persons, and women.

"Children must not be employed until they have completed eight years of age, and must not be employed for more than six and a half hours in any one day, nor before six a.m. nor after eight p.m. While so employed they must attend school at least ten hours in every week, a certificate of which attendance must be procured weekly by the employers from the principal teacher of the school.

"Children, young persons and women, must not be employed on Sundays, nor after half-past four p.m. on Saturdays.

"Young persons (*i.e.*, between the ages of twelve and eighteen years), and women, must not be employed for more than twelve hours in any one day, nor before five a.m. nor after nine p.m.

"The carrying out of these provisions is the duty of the local authorities, and having been directed by the Home Secretary to report to him how the "Workshop Regulation Act, 1867," has been observed in my district, I should feel obliged by your

informing me of the steps taken in your jurisdiction for the administration of the Act, and of the results of any action taken in the matter. I should be glad to receive your communication by the 31st October next."

I addressed in all 268 local authorities, and the information I have received enables me to state that steps have been taken in a very fair proportion of localities. It could not be expected that so responsible a duty would be undertaken without some inquiry, or that in every town there would be an implicit acceptance of a new duty, and the résumé which follows, of the course of proceeding adopted in different jurisdictions, shows that the question is working its way gradually, and in very many instances effectually, so that I believe I shall at no distant date be able to report that the Workshop Regulation Act is administered as a rule by the local authorities throughout my district.

It will be seen from the following, that different authorities have adopted different modes of procedure; some having taken the question up actively, and others are only now preparing the way by enquiry for further action.

The Act may be said to have been adopted in the whole of the metropolis, and the example thus set by the metropolitan authorities will have the greatest influence upon the proceedings of other municipal bodies.

The most effectual mode of administering the Act has been to place the matter in the hands of the medical officers of health. I proceed, therefore, in the first place, to enumerate those localities in which this has been done.

The medical officer of health has been appointed to administer the Act; abstracts and notices issued, and places visited when inspection deemed to be necessary, and persons persistently offending have been fined;—

In the city of London.

In the jurisdiction of the following metropolitan vestries:—

Bermondsey; Bethnal Green; Camberwell; Chelsea; Clerkenwell; Islington; Lambeth; Kensington; Mile-end; Paddington; St. George, Hanover Square; St. George in the East; St. George the Martyr; St. James, Westminster; St. Martin's-in-the-Fields; St. Marylebone; St. Mary, Newington; St. Pancras.

In the jurisdiction of the following Metropolitan District Boards of Works:—

Hackney: Holborn; Lewisham; Limehouse; St. Giles; St. Saviour, Southwark; Strand; Wandsworth; Westminster; Whitechapel.

Registers of the workshops within their jurisdiction have also been prepared by the medical officers of the following districts:—

Hackney; Paddington; St. Leonard's, Shoreditch; St. Pancras; St. Saviour's, Southwark.

In the other metropolitan districts, Fulham, Rotherhithe, Greenwich, and Lewisham, enquiries were in progress as to the administration of the Act in their jurisdictions.

The local authorities of the following important commercial and manufacturing towns have appointed officers to enforce the Act, and have issued notices, and in some cases offenders have been fined:—

Blackburn; Bradford; Dewsbury; Halifax; Huddersfield; Greenock; Hull; Leeds; Manchester; Norwich; Nottingham; Oldham; Salford.

Among numerous other places where I have been informed by the local authority that officers have been appointed, or that steps have been taken to distribute abstracts of the regulations, &c., and eventually to visit places coming under the definition of workshops, are the following important towns:—

Ayr; Banff; Beverley; Brighton; Bury St. Edmunds. Cambridge; Canterbury; Chatham; Deal; Dover; Dumfermline; Durham; Edinburgh; Gravesend; Harwich; Ipswich; Maidstone; Mansfield; Margate; Rochester; Sheerness; York.

From a considerable number of localities I am informed that there are no employments coming within the definition of a workshop. From many others that enquiry has been made, and that the customs of the occupations are quite within the regulations. But there are others in which I think further action is necessary, and I hope to induce the authorities to take the matter up in earnest, but some little time is necessary. I am also desirous of showing what has been done in other places; for some local authorities stated to me they were waiting to see what was done elsewhere. The information now given refers only to what was accomplished up to the 31st October last; since that date the subject has been considered in very many towns. I sent a circular at the latter end of 1867 calling attention to the regulations which would come into operation on the 1st January 1868, and I am about to communicate with all the local authorities in my district, in order to lay the foundation for uniformity in administering the law throughout all my district.

I now beg to call your attention to the following extracts from communications addressed to me, as illustrat-

ing the spirit in which the new Act has been accepted in some of the most populous places. Dr. Aldis, the medical officer of health of St. George, Hanover Square, thus details the result of the operation of the Act in his district:—

"In compliance with a resolution of the vestry held on the 20th of November last, Mr. Chappell, the vestry clerk, supplied me with printed abstracts of the Act, which have been distributed to different workshops, to many of the clergy and schoolmasters in the parish.

"Soon afterwards I received a letter from Sir Richard Mayne, with two communications and papers respecting cases of alleged contravention of the Act; but I did not take proceedings, after having ascertained the truth of the charges, as the parties accused promised to carry out the provisions, and to do all that was required. They did not, however, keep their promise, and were ultimately convicted. Although I meant urgently to demand a diminution of the hours of work, I did not take advantage of evidence obtained after the first complaints, as it was my object to carry out this new Act in as conciliatory a manner as possible, rather than excite a strong opposition to that which is essentially good, and conducive to the health of the milliners and dressmakers.

"These, which were, I believe, the first convictions under the Act in London, led to my receiving so many letters from various places that I was compelled to write to the papers, referring the complainants to their respective local authorities.

"The following method is that which I have adopted, on ascertaining that any of the provisions of this Act had been contravened. Having entered the premises, I took the evidence of the needle-women as to their hours of work and time of meals. I then inspected the workshops, and the condition of the bed-rooms, as to cleanliness, size, and ventilation.

"Should the Act have been infringed I cautioned the employers against doing so in future, and should they have consented to obey the law I did not proceed against them, unless they neglected to fulfil their promise; for many milliners and dressmakers reasonably pleaded ignorance of the law.

"I have received 47 complaints up to the present time against different establishments in St. George's parish, and, although mostly anonymous, still in nearly all there were grounds for complaint.

"I have obtained convictions in the following four cases:—

"(1.) Miss Eleanor Salmon, dressmaker, No. 49a, New Bond Street. April 29th, at Marlborough Street. The defendant paid only the costs, as I did not press for a penalty.

"(2.) Mr. John Verdie, milliner and dressmaker, No. 23, George Street, Hanover Square. May 8th, at ditto. One shilling and costs.

"(3.) Mr. B. Studer, ditto, No. 9, Bruton Street, Bond Street. May 27th, at ditto. 20*s.* and costs.

"(4.) Miss Harriett Axford, 8, Arabella Row, Pimlico. Aug. 6th, at Westminster. 20*s.*, and 8*s.* costs, or 14 days.

"I am satisfied that these proceedings have almost entirely diminished the excessive hours of work in this parish for the present, and I believe that the result will conduce to the health and social welfare of the milliners.

"With regard to the moral aspect of the question, I have been told by several of the employers that I shall 'drive the young women into Regent Street.' On further inquiry, however, I did not find that more than two or three employers paid any attention to the moral improvement of the girls. But I have always taken an opportunity of mentioning one bright example to the contrary, shown by a proprietor whose establishment in this parish I have inspected without receiving any complaint against it. He has always been a warm advocate for the Act, and employs a great many young women under its restrictions, with sufficient profit to himself. He sees that the in-door workers have daily exercise in Hyde Park, affords them opportunities for daily prayer, and provides them with sittings in a chapel connected with the Church of England, thus endeavouring to the best of his ability to improve their moral and physical condition. He would not wish me to mention his name, but publishing the fact may induce those who think the Act likely to increase immorality to reflect whether they cannot counteract it in the way indicated, subject of course to variation of religious principles."

Dr. Letheby, the medical officer of the city of London, thus describes the course he has taken:—

"Immediately on the coming into operation of the Act of Parliament referred to, I reported of the matter to the Commissioners of Sewers, and at their request I prepared an abstract of the regulations of the Act, for the information of the Commissioners, and for distribution among the women of workshops within the city of London. I also directed my inspectors (four in number) to make out a list of all the workshops within the city, and from that time to the present a regular inspection of them has been maintained. The results of these inspections are reported to me, and whenever there is an infraction of the rules I make a point of visiting the places myself, and taking measures for the correction of any sort of maladministration."

From a report by the vestry of St. Pancras it appears that—

"A complete visitation of all the workshops has just been completed, and I enclose a copy of the report thereon furnished by the inspector, from which it will appear that the Act is, with one or two exceptions, fully complied with in this parish.

From this return it appears that the workshops were visited by the inspector, and that 111 were found to be, as regards the provisions of the Workshops Act, 1867, in a satisfactory condition. In two cases it appeared that the hours of work were illegal, and in two cases the work-

rooms were overcrowded and unhealthy, but remedies were adopted, and grounds of complaint were removed.

In the parish of Islington the sanitary committee report that—

"A considerable number of workshops have been visited and reported upon by Dr. Ballard, the medical officer of health. Legal proceedings have also been taken in two instances against artificial florists, for overcrowding and bad ventilation, under the Sanitary Act of 1866, and at the present time the sanitary committee have a report on the agency of the business of the vestry, recommending legal proceedings in one case for an infringement of the 6th section (par. 4) of the Workshops Act, 1867."

Mr. Rickards, Sub-Inspector of the Leeds district, in a report of what he had done in the course of the half-year in connection with the Workshops Act, states:—

"In Leeds, finding that nothing was being done by the local authorities, I brought the matter before the committee charged with the duty of putting the Act into operation. I met the committee by appointment, and pointed out to them that I had received several complaints that the provisions of the Act were not enforced, from parties who were placed under the Factory Acts Extension Act, 1867, by reason of employing more than 50 hands. The result of that interview was that about 1000 copies of the abstract of the Workshops Act were distributed by order of the committee; and the various parties were warned that they must strictly obey the law. After the lapse of a few weeks proceedings were instituted before the magistrates in several cases, and convictions were obtained, chiefly, I believe, for working young women in dressmakers' establishments after 4.30 on Saturdays.

"At Bingley, Mr. Ruffe, the certifying surgeon, was appointed inspector under the Act by the local board at a salary of 2*l.* 2*s.* per annum. He reports to me that there are few places under the Act, and that he has no reason to believe that the Act is infringed.

"At Keighley, an inspector was appointed at a salary of 10*l.* per annum. There are several places there to which the Act applies, and two of them, where paper tubes are made, I have visited. At both places I found children at work under eight years of age, and they had been so employed for more than a year. Their work consists in making a certain number of tubes per day, and at one of the places the children are locked up until the quota of tubes is completed, in place of leaving at 6 p.m. I mean, of course, that this was the case at the period of my visit, though what may be the order now I am unable to say. The inspector reports to me that timely notice having been given to the parties in his district who are under the Act, its provisions will now be strictly enforced.

"At York, I drew the attention of the town clerk to the Act, and as nothing has been done in the matter, he promised to bring it before the council on the following week. This he did.

"At Beverley, I went, by request of the mayor and committee, to confer with them on the subject of the Act. The mayor brought the matter before the council, and an inspector was appointed; but the mayor stated to me that he thought there were few places in Beverley under the Act.

"At Hull I am told the Act has been put into operation by the council."

The mayor of Leeds, T. W. George, esq., has favoured me with an account of the proceedings under the Act, from which it appears that six occupiers of workshops have been fined for employing young persons at illegal hours:—

"In reply to your circular of the 15th September last, I have to inform you that a sub-committee of the watch committee of this borough was appointed to carry out this Act, and abstracts of its provisions have been distributed by the police to all persons known to be liable to its penalties. During the time it has been in operation the following persons have been convicted under its provisions:—

"1st July 1868. John Burton, for illegally employing young girls. Fined 10*s.* and costs.

"1st July 1868. Morriss Simpson, for illegally employing young girls. Fined 10*s.* and costs.

"22nd July 1868. Emily Varley, for illegally employing young girls. Fined 1*l.* and costs.

"22nd July 1868. Messrs. R. and J. Smeeton, for illegally employing young girls. Fined 5*s.* and costs.

"23rd July 1868. John Griffith, for illegally employing young girls. Fined 10*s.* and costs.

"1st October 1868. Jacob Bond, for illegally employing young girls. Fined 5*s.* and costs.

"The Act, so far as I am aware, has been fully put into force, and it is generally observed in the borough."

With reference to that part of Mr. Rickards' report in which he refers to the number of very young children employed in paper-tube making, I have been in communication with the local inspectors, who have informed me that the provisions of the Act are properly observed in these establishments.

The local inspector for Keighley thus reported his proceedings to the local board:—

"That on his appointment by the local board to inspect the workshops within the district, he found some paper-tube manufacturers employing children under the proper age, and also employing children too long hours. That he explained to them the provisions of the Act, and he was happy to be able to report that since then the law was cheerfully obeyed."

The local inspector for Bingley, in a report to me, says:—

"I have only one workshop in my district. It came under the Workshop Regulation Act the last week in July, and the requirements of the Act have been strictly observed since it came under my inspection. There are only about 10 children employed. The workshop is clean and well ventilated."

In a subsequent communication Mr. Miner says:—

"I have looked over the school books nearly every week, and I have always found it entered properly up with the children's names by the national schoolmaster at East Norton."

And Mr. Rickards himself, writing to me on the 13th Nov., says:—

"I visited this place (Keighley), and found the attendance of the children at school was very regular, and it was evidently the proprietors' wish that such should be the case."

Mr. Sub-Inspector Lakeman states that,

"At present, Halifax is the only place to which an officer has been appointed. I succeeded in procuring the services of an officer of police in each portion of my subdivision during the month of May, each of whom delivered a copy of the Workshops Abstract to the several employers of females and young persons throughout the subdivision."

Mr. Sub-Inspector Oswald, who resides at Nottingham, in whose subdivision a very large number of children and young persons are employed in workshops, has visited many of these places to explain the necessity of the children being sent to school, and I think it is evident from his report that could some time be spared from his own proper duties, or were the local authority more active in the matter, the provisions of the Act would be fairly observed. Mr. Oswald says, in a recent report:—

"You requested me, about six months since, to visit some of the places affected by the Act.

"I called at about 150 establishments, but confined my attention principally to the lace clipping shops, as more young hands are employed in them.

"In forty shops I found five hundred children working, the larger proportion under *twelve* years of age, and at least half under eleven.

"Since that time the activity in the lace trade has considerably swelled the numbers. The shops were generally badly ventilated, and very dirty; but I induced a good many of the employers to limewash; and in most cases the children under eleven were sent to school.

"I have lately visited the schools, and the masters all inform me, that although they attended for a short time a gradual decrease

has been going on. The numbers on the books, including Radford, Sneinton, and Lenton, are 69 boys and 103 girls; but in many cases the attendance is very irregular; and they are working considerably more than six and a half hours.

"In Radford, on my previous visit, Mr. Manly (who has taken great pains in the matter) had *fifty* in attendance, but he now has only *twelve*; and the same decrease has taken place in the Nottingham ragged schools, where no charge is made.

"The masters all say that the children have left, and gone back to 'full time' as the employers find that no one visits the shops to inspect the certificates.

"In all the smaller warehouses and dressing rooms the Act, as far as I can learn, is a dead letter, and I have great complaints from the few who are under the Factory Acts.

"I should certainly recommend that all branches of the lace trade be brought under government inspection; but if this is not done one local inspector should be appointed by the whole of the local authorities of Nottingham and suburbs.

"A great quantity of lace clipping and bugling is now done in the villages round Nottingham; but as I do not visit these places I cannot say how the young persons and children are employed.

"The milliners' shops in Nottingham have generally complied with the Act; and in many instances the half holiday is given to all employed on the premises.

"In the other parts of my subdivision I have not heard of any action being taken by the various local authorities, but I do not imagine that many young hands are employed, although in some of the Lincolnshire towns I am informed the females are worked very long hours in millinery establishments.

"In several cases of this description I forwarded the employer an abstract of the Act."

I have had also a satisfactory communication from the mayor of Nottingham, J. Barber, esq., that the Act has been put into operation in the borough of Nottingham, and representing the difficulties with which the employers of labour have to contend with in the borough, from the migration of children to places outside the borough where the Act is not under the supervision of any public officer.

"In reply to your circular of 15th September last, as to 'The Workshops Regulation Act, 1867,' I beg to inform you that handbills giving the substance of the Act of Parliament have been extensively distributed in Nottingham, and copies of such handbill printed on pasteboard ready for hanging up have been sent to the factories, and to houses where children are employed; that one of the inspectors of our police force has been employed to take proceedings in cases of infringements of the provisions of this Act of which he obtained information, and that he has brought six cases before the magistrates; that the parties informed against have in every case been convicted, and fines varying from 20*s.* to 40*s.* have been imposed upon them.

"I am instructed, however, to represent to you that there is a population of about 30,000 persons outside Nottingham, forming what is known as the Radford union, consisting of the parishes of Sneinton, Lenton, and Radford, who are not under the jurisdiction of the authorities of Nottingham; that it does not appear that any steps have been taken in these adjoining parishes to enforce the Workshops Regulation Act; that if this Act be not uniformly enforced the persons who conform to the law suffer, and the illegal employment is removed to other places less under observation, and where it can be carried on with more impunity; and as an instance of this it may be added, that in one case the party proceeded against has taken a room outside the borough in which to carry on her business.

"I beg to add, that for the reasons stated it is considered right and essential that the law should be enforced alike in every district, and that there should be sufficient legal power to secure this being done."

The places named by the mayor as being without supervision are the same as those which are mentioned in Mr. Oswald's report; viz., Radford, Sneinton, and Lenton. It would be most desirable that the local authorities of these places should take the matter up in earnest. No great expense or trouble need be incurred in the first instance. I am ready to supply the public authorities with abstracts of the Workshops Act, by the distribution of which the regulations will become known, and if the local authorities will then publicly express their determination to enforce the law, if necessary, I believe regularity of hours of work will be almost universal; but there must be some supervision, some authority to be appealed to, who will act when the necessity arises. Much may be done by simple means; and at one of the places above named, Lenton, I am happy to find that a step has just been taken which will be the means of preventing the employment of children under age, or at illegal hours, in that neighbourhood. I have received the following interesting letter from Mr. Walker, the eminent lace manufacturer, who has taken the question in hand as a public duty, and who will, from his known energy of character, go thoroughly and fully into the task he has undertaken.

"A communication from you, dated the 15th of September 1868, and addressed to the highway board of this parish, was delivered to me, as the chairman for the time being of that board. Without minutely examining its contents, I handed it over to our clerk, and requested him to look into it and report to me afterwards. But noticing that you wished for a reply as to how the 'Workshops Regulation Act, 1867,' was observed in this district, I wished him to send you as much information as he could glean on the subject by the time specified. We had a board meeting last

night, and I learnt, for the first time, that he had done nothing in the matter. He returned me the Act and papers you sent; and when I got home I perused the whole very carefully, and this letter is the result. I see the board has power to employ a paid agent to carry out the regulations of the Act, but till the 'exemptions' have run out I much question whether its strict application would occasion much difference. For instance, a woman who has work (mending) from my factory employs between 20 and 30 young women, or 'young persons,' as the Act calls them, and I go occasionally to look how they are getting on (they are about ¾ of a mile from the factory). I did this last Monday night and questioned her as to the ages of the girls she employed, and without knowing exactly the requirements of the Act, I found, if she was infringing its requirements at all, it was only in a very small degree; but now that I have made myself master of its contents, I will take care that she is made acquainted with them also.

"And on enquiry last night two or three other parties were pointed out as the employers of children and young persons. I will take an early opportunity of personally visiting these parties, and if I find they are transgressing I will either get them put right, or in case of non-compliance will let you know. Therefore, before we incur any expense in appointing a paid officer, I will see whether there is a necessity for it, by making myself personally acquainted with the facts.

"This has suggested itself to my own mind as being the simplest and most effectual way of dealing with the question in the present stage of it.

"Perhaps you will remember coming down to my place yourself,—Spring close, Lenton."

Mr. Jas. Johnson, the sanitary inspector of the borough of Kilmarnock, after having inspected the workshops in his jurisdiction, reports most satisfactorily of its effects, and of the readiness with which both masters and operatives have co-operated with him.

"In accordance with your request, I beg respectfully to submit a report respecting the carrying out the provisions of the Workshops Regulation Act, 1867, in the burgh of Kilmarnock. There are a good many works which come under the provisions of the Act; the most of these are in every respect well suited for the purpose. Large in dimensions, well lighted and ventilated, and kept perfectly clean; and in such premises are generally found the best conditioned workpeople. In the other cases I have enforced cleanliness and ventilation, also water-closet accommodation for the separate use of each sex. It will be my endeavour to keep up and improve this wholesome change. I can state with the utmost confidence that the operations of the Act are a great boon both to the trades and to the community. It is due both to the masters and workers to state, they have given their willing co-operation.

"The provisions regarding the hours for children, young persons, and women is now carefully attended to, and its beneficial tendency is fully admitted. I do not know that I have at present any thing further of importance to communicate to you."

The following letter from the inspector of the poor, Kilbarchan, shows a painstaking desire to fulfil the provisions of the Act:—

"Sir,

"I was duly favoured with yours of yesterday, and have to-day commenced going through the weaving shops of the village. It will be a somewhat tedious affair, as I have to explain the provisions of the Act to the occupier of every shop, but I will finish it as soon as I can, and communicate with you immediately thereafter."

Uniformity of practice and similarity of principle seemed to me to be of such great importance in the administration of this Act, that I invited the medical officers of health of the metropolis to a conference at this office on the 25th November last, in order that we might ascertain what the principal objections and difficulties had been.

There were present the following medical officers of health:—

Dr. Aldis, St. George, Hanover Square.
„ Bateson, Southwark.
„ Bristowe, Camberwell.
„ Buchanan, St. Giles.
Mr. Bianchi, St. Saviour's.
Dr. Green, St. Pancras (acting).
„ Hardwicke, Paddington.
Mr. Lord, Hampstead.
Dr. Nicholas, Wandsworth.
„ Noel, Tooting.
„ Puckle, Lambeth.
„ Sarvis, Bethnal Green.
„ Tripe, Hackney.
„ Whitmore, Marylebone.

After I had stated the object of this conference, I requested Dr. Aldis to favour the meeting with his views, as he had taken an active part on the question.

Dr. Aldis stated, that although a threat had been held out that he would be required to produce his authority, he had never been refused admission to a workshop, even when he had to complain of overwork.

Dr. Whitmore thought it was not the duty of the medical officers of health to enforce the Act.

Dr. Tripe referred to clauses of the Workshop Act, which seem to limit the power of the local authority. He had been refused admission, but afterwards entered under the provisions of the Sanitary Act.

Dr. Bristowe had experienced no difficulty.

Dr. Buchanan said there were two aspects to the question; the sanitary and the social. The sanitary provisions came naturally under the control of the medical officers of health, but the social, the educational, seemed to be beyond their province. Not that he considered the medical officers could not act, but that they were outside their province.

Mr. Lord, Dr. Puckle, Mr. Bianchi, explained what had been done in their parishes.

Dr. Sarvis said that in Bethnal Green great difficulty is experienced in carrying out the Act. The vestry have power, but consider it inexpedient to enforce it. There are numbers of little boys from 8 to 13 years of age in sundry trades, employed from 8 to 10 hours per day, who do not attend school. Hundreds work from 6 to 6 on Saturdays. The vestry have hitherto been content with posting bills through the parish, and issuing handbills; they are principally small places, a great many being shoemakers. In the present state of poverty, if their working were stopped, it would create great dissatisfaction. If the Acts were enforced it would probably cause a riot, and he could not advise the vestry, under existing circumstances, to carry out the Act in its entirety. It would necessitate the employment of 20 inspectors.

Dr. Hardwicke said that in Paddington they had ascertained the names and addresses of the occupiers of workshops, the size of the workrooms, number of machines and occupations. There has been no necessity for further interference, and should not do so unless he received special instructions from the Committee. In endeavouring to obtain information as to the working of the Act, especially from Dr. Whitmore, he thought "the meeting will lead to a discussion causing general and uniform action on the part of the authorities. The duties of the medical officers are sanitary, but there are other functions, and it is a question if they should undertake them. If they do, they will be sub-inspectors of workshops under you. It would be useful that forms should be filled up for the information of the Government; and the matter should be put in such a way that it can be done and paid for. It will end in separating the medical officer of health from private practice."

Some discussion then ensued as to the amount of cubic space that should be agreed upon for adoption throughout

the several districts; but it was determined to postpone the consideration of this and other matters to another meeting, to be convened for the purpose.

The general feeling of the meeting was, that the Act could be administered under the direction of the medical officers of health, and there was a strong desire that there should be uniformity of principle and practice in the metropolis.

In some important towns, however, there has been a decided objection on the part of the local authorities to administer the Workshops Regulation Act, except in so far as relates to its sanitary regulations. There are doubtless defects in the Act; there are regulations which might be improved; there are some points upon which opinions may differ; but there has been no difficulty in enforcing the Act by those officers who desired to carry out the spirit of the legislation, and there have been no quibbles or objections upon the part of the occupiers of workshops, so far as I have ascertained. I conceive it to be a misfortune of great magnitude, that difficulties should be anticipated, instead of being met when they present themselves. I have now had a lengthened experience in administering Acts of Parliament, interfering with the "liberty of the subject," and containing many loopholes by which a wrongdoer may escape, and wanting some provisions which have occasionally been thought indispensable. I have found, however, that, taking a broad common sense view of the object of the Act of Parliament, putting upon its provisions a fair and reasonable construction, without caring to refine upon the mere meaning of a term, I have, with the cordial co-operation of the staff of my district, been able to enforce the provisions of the Factory Acts fully and fairly, and, avoiding controversy upon points of little moment, the real and great object of the Legislature is obtained.

It may be objected that under the Workshops Act, work may commence at 5 a.m., and be continued with intervals until 9 p.m., so that, although a person may only work ten hours and a half, yet they may be actually kept in attendance for 16 hours. With the experience of above a year, I have not found a single instance of work being intermittent, and but one instance of work and meals together exceeding 12 hours, and that was a case in which the hours were from 7 a.m. to 7.30 p.m. with intervals of two hours for meals. I have not yet found in any workshop that work has commenced before 6 a.m., and in only a few were the hours of work from 9 a.m. to 9 p.m., and in some of these they have been altered to eight.

I heartily wish those local authorities who have not yet put the Act into operation would enter upon the consideration of the Workshop Regulation Act with the desire to do the best they can with the law as it stands; to give its provisions a fair trial, and not reject it because they consider their power to be somewhat restricted.

It is the law of the land that no child shall be employed under the age of eight years; that no child shall be employed without attending school; and that every child, young person, and female shall work moderate hours, and shall have a half-holiday once a week.

Surely these are regulations which it cannot be difficult to enforce. Let them be published far and wide; let every employer know that the same restrictions apply universally; and my knowledge of the sterling good sense, and the fair and moderate views, of a very large proportion of the masters of workshops, satisfies me that the law will be observed cheerfully, and that there will be no great need of prosecutions. But the new provisions must be well circulated; they must find their way to every workshop, and be largely distributed amongst the workpeople themselves. In fact the chief work of administering this Act will be in explaining its very few and simple regulations, and making them known.

I regret to report, that while the Factory Act is, on the whole, observed in Sheffield, the Workshops Act has been almost ignored. This is the more extraordinary as the workshops in Sheffield come in direct competition with the factories, and it is difficult to realize that the large body of manufacturers should acquiesce in one part of the town being under restrictions, and the other part being unregulated. The Chamber of Commerce of Sheffield is alive to the vast importance of the subject. It has been frequently discussed; and I have been both in personal and written communication with the mayor and the sanitary committee. The latter body take the course which I so much deprecate, of looking at the Act of Parliament critically, and, finding an apparent flaw, declining to do more than they conceive they are required to do by the strict letter of the Act of Parliament.

The effect of the decision of the sanitary committee of Sheffield is to leave those employers who occupy workshops at liberty, if they should be so inclined, to evade the Act of Parliament; and those employers who occupy factories, and are competing with the workshops, subject to an unfair and illegal competition.

I have stated that what in my opinion is required to cause the Act to be administered is to rouse the inertness of the local authorities. Many were not aware of the existence

of the Workshops Regulation Act, 1867; many have an unwelcome belief that they ought to enforce the Act, but hesitate to act, unless all similar bodies in the country act likewise; but there are few of the local authorities who, when the matter has been sufficiently explained, have declined to take proper steps for making the Act known in their jurisdictions, and to prepare for the enforcement of it, if necessary.

I requested Mr. Whymper, the Sub-Inspector for Kent, Surrey, and Sussex, when he was able to spare time, to seek interviews with the local authorities of such of the towns in these counties as he must necessarily visit on a recent tour of inspection; and the memorandum which I have just received from him proves that the local authorities will take up this question in a proper spirit, and act with promptness, as soon as they are made aware of the responsibility which attaches to them.

Mr. Whymper's Memorandum is as follows:—

"Workshops Act.

"*Ashford.*

"At interview with partner of clerk to local board (Nov. 18)

"The Act had been brought before the board by the clerk, and a precis of the Act read, but up to that time no action had been taken.

"By letter (Dec. 28th) (inclosing full newspaper report of discussion and resolutions).

"The inspector of nuisances and the superintendent of police have been instructed to report to the board any infractions of the Act, and to see that its provisions are complied with.

"*Canterbury.*

'At interviews with town clerk (Nov. 28 and Dec. 5).

"Should at once be submitted to the town council.

"By letter (Dec. 24).

"The town council have appointed the city surveyor to be inspector under the above Act, and they are about printing an abstract of the Act, in the form of that received from the Factory Office, for circulation among those who are affected by the Act.

"*Chatham.*

"At interview (Dec. 23).

"The local board will at once set their inspector to work, and will communicate with the Sub-Inspector of Factories.

"By letter (Jan 4/69).

"It was resolved by the local board, at their meeting on January 1, 1869, that the clerk issue public notices of the provisions of the Workshop Regulation Act, 1867, and that the subject be placed in the hands of the surveyor, for his immediate attention.

"*Deal.*

"At interview (Dec. 10) with the mayor.

"Would at once refer the Act to the town clerk.

"By letters from town clerk (Dec. 23 and Jan. 2, 1869).

"Will be laid before the council at their next meeting on Jan. 1.

"A resolution was unanimously passed, at a council meeting held Jan. 1, to appoint Thomas Baker the inspector of this borough under the Workshop Act, 1867, and that officer is directed to take action thereon forthwith, and make his report to the council at their next meeting to be held on the 3rd February next.

"*Dover.*

"At interview (Nov. 24) with town clerk.

"Handbills had been printed, and circulated among the workshops under the Act. An officer under the corporation has been specially instructed to see that the provisions of the Act are attended to.

"*Folkstone.*

"At interview with town clerk (Nov. 21).

"Should at once be referred to the local commissioners.

"By letters (Dec. 10, 21, 22, and 28) further information, &c. was requested, and it was stated that—

"The town clerk brought the subject of the Workshops Act before corporation on Dec. 2, and it was resolved that the necessary steps be taken and notices published.

"By letter (Jan. 2/69).

"The town clerk has, according to the instructions of the corporation, caused the copies of the abstract of the Act to be distributed amongst the workshops in the town, and has instructed the superintendent of police to make a list of the shops, and to investigate any complaints of infringements.

"*Gravesend.*

"At interview with town clerk (Dec. 23).

"His attention had not hitherto been given to the subject, but now that it was so no time should be lost in taking effective measures.

"By letter (Dec. 29).

"Will without delay bring the matter under the consideration of the local authority.

"*Hythe and Sandgate.*

"At interview (Nov. 21) with the town clerk.

"Would, on receipt of a supply of abstracts, &c., at once look into the matter.

"By letter (Jan. 1/69).

"There will be a meeting of the town council of Hythe in February, when I will bring the matter before them. I will also bring the matter before the Sandgate local board at their meeting on Thursday next.

"*Maidstone.*

"At interview with town clerk (Oct. 30).

"Attention had been drawn to the Act, and very systematic steps were about to be taken.

"At interview (Dec. 22).

"The matter had been unavoidably postponed, but the Act of Parliament should be brought before town council on January 1, and orders given that it be effectively administered.

"By letter (5 January 1869).

"At a special meeting of the town council of the borough of Maidstone, held at the town hall on Friday 1st day of January 1869, Charles Arcoll, esq., mayor, in the chair :

"It was ordered, that Robert Golding Hills, the senior inspector of police, be appointed an inspector to carry out the provisions of the Workshop Act, 1867, during the pleasure of the council, and to report thereon to the watch committee.

"*Margate.*

"At interview (Dec. 4).

"The town clerk expressed himself quite prepared to bring the Act before the local authority.

"By letter (Jan. 2/69.)

"The Act, and Mr. Redgrave's letters, have been laid before our town council, and the matter has been referred to a committee to report upon. As soon as the council take further action I will write again.

"*Sandwich.*

"At interview (Dec. 10) with town clerk I explained the bearing of the Act, and that gentlemen undertook to enter into the matter at once.

"By letter (Dec. 14).

"Since your interview with me, I have considered the subject, and brought its requirements under the notice

of the mayor, who will take an early opportunity of calling the attention of the town council to the duties required of them.

"*Rochester.*

"At interview (Dec. 23) the clerk declared his willingness to take prompt steps.

"By letter (Jan. 28).

"At a meeting of the estate committee of the corporation of the city, held on Wednesday last, it was resolved that an epitome of the above Act be published, and distributed throughout this city, with the view to its provisions becoming more generally known.

"*Tenterden.*

"By letter (Dec. 24) from mayor.

"Had written to Mr. Redgrave, that he would take care the subject should be brought before the council at their next quarterly meeting, which had not then sat, the time of writing' taken place.

"*Tonbridge.*

"By letters from clerk to local authority (Nov. 14).

"Will draw the attention of the authorities to the matter.

"(Dec. 26.)

"Has been in communication with the parish officers on the subject, who propose to convene a vestry meeting in the course of a few days, for the purpose of putting into operation the Act in this jurisdiction.

"*Tonbridge Wells.*

"At interview (Dec. 30) with chairman of local board, and again (Dec. 31) with watch committee of board, readiness was expressed to attend at once to the Act.

"By letter (Jan. 6/69.)

"The Workshop Regulation Act, 1867, was considered by the local board, at their meeting here this day, and a proper officer will be forthwith appointed to carry into effect its provisions.

"*Brighton.*

"At interviews with town clerk (May 6th, October 6th, October 20th) assurances were given that the Act should be at once brought before the council, and I was consulted as to the best way of carrying it out, &c.

"From minutes of the proceedings of Pavilion committee (Oct. 5), the mayor in the chair, it appears that a report on the subject was presented by the head inspector of nuisances, and that a resolution was passed to apply to the Factory Inspector's Office for abstracts of the Act. These were sent.

"By letter (Dec 24.) from town clerk.

"The town council of this borough have sent prints of an abstract of the Workshops Regulation Act, 1867, to the persons within their district likely to be affected by it as employers, and they have also inquired into all complaints which have reached them, but hitherto they have not found it necessary to take any legal proceedings under it.

"I may add, that I have myself forwarded several of these complaints to the council, and they have been investigated.

"*Cuckfield.*

"By letters (Oct. 26 and Dec. 24) from clerk.

"In such a purely country district as this, the Act has scarcely any application. There has been no meeting of the local board since you were down here. They will, however, meet soon, and I will then get them to do something."

"*Hastings and St. Leonards.*

"At interviews (Aug. 1, Nov. 19) with town clerk.

"Explanations were given, and the town clerk undertook that the Act should be administered at once.

"By letters (24 Nov., 30 Nov., 24 Dec.)

"I (the town clerk) have forwarded the abstracts of the Act to all places in this borough employing young persons, and I know of no case of infringement of the Act here. (Dec. 24.)

"The two former letters asked for papers, &c., and expressed readiness to act.

"*Lewes.*

"At interview with clerk to commissioners (Oct. 22), I received copy of the following extracts from the proceedings of the committee at meeting of Oct. 7, 1868, and of commissioners, Oct. 14, 1868.

"The clerks produced handbill containing an abstract of the principal provisions of the Workshops Regulation Act, 1867, and called the attention of the committee to the chief points under the Act. Resolved, that the committee recommend to the next quarterly meeting that the abstract produced by the clerks be reprinted, with a notice at the foot to the effect that all complaints of contravention of the Act be made to Mr. Frank Davy, the inspector of nuisances to the said commissioners, and that such bills, when printed, be distributed in the town.

"Extract from the minutes of a general meeting of commissioners, held 14 Oct. 1868.

"Resolved, that the recommendations passed at the committee meeting on 7th October instant, relative to

the reprint of the handbills containing an abstract of the Workshops Regulation Act, be adopted, and the bills printed and circulated. This has been done.

"*Lindfield.*

"At interview (Oct. 23), in the absence of clerk to local authorities, I explained the matter to his predecessor.

"By letter (Dec. 26).

"Fresh assistance and instructions are asked for, in order to enable the local board to comply with the law.

"*New Shoreham.*

"At interview with clerk to local board (Oct. 20.) the clerk undertook at once to refer the matter to his board.

"By letter (Dec. 28.)

"The chairman of local board is not aware of any instance within this district in which a violation of the Workshop Act, 1867, has occurred. Should such a case occur, the local board will proceed to avail itself of the powers given by that Act.

"*Rye.*

"At interview (Nov. 19) with mayor and town clerk, the Act was referred to, and a system of inspection suggested and approved.

"By letter (Dec. 28) from town clerk.

"Very soon after your visit to Rye, I called the attention of the local authority to the subject of it, and by their direction I was about to issue some printed notices when I received a packet of abstracts of the Act, which I have substituted in circulation.

"*Worthing.*

"At interview (Oct. 13) with clerk to local board, the usual willingness to administer the Act was expressed.

"By letter (Jan. 1.)

"The local board appointed a special committee to perform the duties devolving upon it under the Workshop Act.

"That committee have visited every person in the town employing young people and women, and left with them an abstract of the Act, at the same time cautioning them as to the consequences of its infringement.

"*Croydon.*

"By letter (Sept. 26) from clerk to Board of Health.

"Will lay the matter before his board on the following Tuesday ; and asks for advice as to the form in which an inspector should be appointed.

"At interview (Dec. 24.)

"I saw the clerk to the board, who referred and introduced me to Mr. Mitchell, the sanitary inspector of the board, in whose hands the administration of the Act had been placed.

"Mr. Mitchell went carefully through the Act with me, and explained that he had made inquiries by a visitation conducted from house to house, with the view of compiling a complete list of the 'workshops' affected. When he should have finished this, he proposed to make a report to his board, and to take fresh instructions as to the details of his further proceedings.

"Both he and the clerk assured me that the matter should be effectively looked into; and the inspector further proposes to watch over and inform me of any infringements of the educational clauses.

"*Reigate.*

"At interview with the mayor (Dec. 24).

"The mayor at once recognised it as his duty to see that the Act did not remain inoperative.

"By letter from mayor (Dec. 26).

"The clauses of this Act have been brought before our town council, and the matter has been referred to one of our committees, to report thereon as to the best mode of carrying out the working of the Act in this borough, under the supervision of our police or sanitary inspection."

I have a vivid recollection of the difficulties experienced in administering the Factory Act of 1833, of the opposition to the regulations, to the Inspectors and to their visits; but whatever imperfections there may be in the Workshops Act,—and this Act came like a thunderclap upon hundreds of employers and employed,—it has not failed yet from its inherent imperfections, if such exist; for, so far as I know, no one has taken advantage of them. I receive daily applications from the masters of workshops to know what is required; they are desirous of being acquainted with the regulations, which they all wish to observe.

The Factory Act, 1833, was evaded and infringed for years, even though Inspectors and Sub-Inspectors were active, vigilant, and zealous as men could be. The Workshop Act has been the law of the land for one year only; and it is obeyed cheerfully and willingly, so far as its provisions are known, throughout a large part of my district, even with the limited amount of supervision which is given to it in many places. I have found through the whole of my experience that formal periodical inspection of Factories is daily less and less necessary. The number of those who

scrupulously observe the regular hours, the tendency towards the employment of older hands, the great improvements in machinery, have all assisted the Inspectors in administering the law. Under the Acts of 1867 an immense number of Factories and Workshops have been placed under restrictions, in which young children are not employed, and in which the number of working hours do not reach the Factory limit of 60 per week. In most works where adult men form the bulk of the persons employed, the hours of work are not long; the men are able to protect their own interests. In these places little inspection is required. The employments which require more supervision are those in which children and females are the bulk of the persons employed; and those are to be found only in particular trades and in particular localities, and it requires some time to ascertain these specialities and the hours worked in them. For instance, in the tobacco factories in Scotland it was the custom for very young children to be employed, but the tobacco factories work less than 10 hours per day. In the tobacco factories in the Metropolis boys, girls, and women are largely employed, and the hours do not exceed nine per day. In the artificial flower trade only girls and women are employed; and, this being what is called a fancy trade, there was a tendency to work long hours in the season. In Nottingham and the neighbourhood it has been the practice to employ very young children in lace clipping. By noting these variations we can arrive at a fair opinion as to where inspection is needful, and where it is less important; and it will not be difficult for me, in the course of some little time, to know in what localities supervision is particularly necessary. There are hundreds of localities where an organized system of inspecting workshops under the Workshop Regulation Act is altogether unnecessary, where there are perhaps half a dozen tradesmen, as bootmakers, farriers, tailors, &c., but in which there is no local industry, and in which long hours are unknown. There are other places, in the Metropolis, the large towns, and towns and parishes, in which some special occupation is carried on, where some superintending authority is requisite to explain, to advise, and probably on some occasions to enforce.

I am satisfied that when the subject has been again brought before the local authorities of my district, those who have not yet accepted the duty of enforcing the Act in places where handicrafts are common, will look upon the question hopefully, in its broad and true sense. Feeling that they have the power of shielding the young, of keeping open

for them the opportunities of attending school, of preventing the injurious employment of females, they will leave all minor questions to be met and overcome as such may arise in the course of time, and will grasp earnestly and with purpose the real core of an Act of Parliament so great in its objects, and so pregnant with good to the whole of the operative classes.

In Appendix No. 4 I have added, as required by the Workshops Act, the names of the persons whose workshops have been inspected during the half year.

I have, &c.,

ALEXANDER REDGRAVE.

Appendix No. 1.

Half-yearly Report of Daniel Walker, Esq., Assistant Inspector of Factories, for the half-year ended 31st Oct. 1868.

Broughty Ferry,
15th November 1868.

Sir,

I beg to inform you that, during the last six months, I have been engaged in visiting factories and other works under inspection, and in carrying on the correspondence incidental to the district placed under my inspection.

I am glad to be able to report to you that, in the course of my inspection, I have experienced very little difficulty in enforcing the provisions of the Factory Acts and of "the Factory Acts Extension Act, 1867." No doubt instances of irregularities have occurred, but not more than might have been expected, taking into consideration the number of works brought by the last-named Act under supervision, and especially in districts where, previously, there were few works under the Factory Acts, and where consequently the purport of these Acts was comparatively little known or understood.

In those cases, in which I was satisfied the errors arose from ignorance or inadvertence on the part of clerks or overseers, and not from any intention of their employers to disregard or set the law at defiance, for their own pecuniary advantage or other cause, I have refrained from recommending proceedings for the purpose of recovering penalties. In the few instances in which prosecutions have been resorted to, there appeared to have been culpable neglect, or an evident intention to evade the law; and in every case convictions were obtained, and penalties imposed with costs.

Perhaps a more stringent course might have been adopted, but not, I think, with advantage, or as being calculated to lead to a more cheerful and strict observance of the law. It has always been my opinion that it is not advisable to have recourse to legal proceedings for offences which may arise from clerical errors or omissions.

I have been desirous of ascertaining the state of education in my district, and, with this view, have directed the several sub-inspectors, and in one instance a certifying surgeon, to examine a per-centage of the young persons, at least thirteen years of age, employed in the principal branches of trade carried on in their respective localities. The towns selected were Edinburgh, Glasgow, Dundee, Newcastle-on-Tyne, Leeds,

Rochdale and Blackburn, in each of which there is a resident sub-inspector.

Being fully aware, from my own personal knowledge, that in many localities the education of the young persons employed in factories and other works under inspection has been neglected to a far greater extent than is generally believed, I carefully avoided adopting, in this investigation, too high a standard. The requirements as to reading being the mere ability to read and comprehend the meaning of an easy sentence; and and as to writing, a little beyond signing the name.

I subjoin the following lists and summary.

EDINBURGH.

Works.	Read and Write.	Can only Read.	Neither Read nor Write.	Totals.
Letter-press printing	9	8	3	20
Book-binding	13	7	—	20
Tobacco manufacturing	4	8	8	20
Iron founding	12	6	2	20
Vulcanite and india-rubber	8	8	4	20
Totals	46	37	17	100

GLASGOW.

Works.	Read and Write.	Can only Read.	Neither Read nor Write.	Totals.
Cotton spinning and weaving	2	8	10	20
Tobacco manufacturing	—	11	9	20
Iron ship building	14	4	2	20
Calendering, finishing, sewing, and employing 50 persons.	13	5	2	20
Pottery manufacturing	4	—	16	20
Totals	33	28	39	100

DUNDEE.

Works.	Read and Write.	Can only Read.	Neither Read nor Write.	Totals.
Flax and jute spinning and weaving	24	9	27	60
Tobacco manufacturing	5	4	11	20
Metal works, including iron ship building.	16	2	2	20
Totals	45	15	40	100

NEWCASTLE-ON-TYNE.

Works.	Read and Write.	Can only Read.	Neither Read nor Write.	Totals.
Engineers	14	—	6	20
Iron-rolling mills	6	2	12	20
Potteries	6	1	13	20
Tobacco manufactories	6	1	13	20
Glass works	8	2	10	20
Totals	40	6	54	100

LEEDS.

Works.	Read and Write.	Can only Read.	Neither Read nor Write.	Totals.
Worsted	17	—	3	20
Woollen	15	3	2	20
Flax	13	—	7	20
Iron-rolling	5	1	14	20
Machinery	17	—	3	20
Totals	67	4	29	100

ROCHDALE.

Works.	Read and Write.	Can only Read.	Neither Read nor Write.	Totals.
Cotton spinning and weaving	22	5	13	40
Mat spinning and weaving	26	5	9	40
Iron founding	18	—	2	20
Totals	66	10	24	100

BLACKBURN.

Works.	Read and Write.	Can only Read.	Neither Read nor Write.	Totals.
Cotton spinners	34	—	6	40
Cotton weavers	38	—	2	40
Metal trades	4	—	16	20
Totals	76	—	24	100

SUMMARY.

Towns.	Read and Write.	Can only Read.	Neither Read nor Write.	Totals.
Edinburgh	46	37	17	100
Glasgow	33	28	39	100
Dundee	45	15	40	100
Newcastle-on-Tyne	40	6	54	100
Leeds	67	4	29	100
Rochdale	66	10	24	100
Blackburn	76	—	24	100
Totals	373	100	227	700

I subjoin a Memorandum of the results of a similar investigation at Dundee, voluntarily made by Dr. Greig, a most active and intelligent certifying surgeon, as to the state of education of 200 young persons recently submitted to him for examination in that town, which gives additional corroboration to the fact that a very low standard of education unfortunately prevails in that part of my district.

" Did not know any of the letters	40
" Knew some of the letters	31
" Knew all the letters	20
" Knew all the letters, and could read short words	46
" Could read well	24
" Could read well and write a little	34
" Could read and write well	5
	200 "

I think the above lists, which I have no doubt have been prepared with great accuracy, and summary, may be assumed as affording a reliable estimate of the state of education in the important towns referred to, and it must be admitted that the result is by no means satisfactory. It tends very much to strengthen the opinion I have for many years entertained that in the factories and other works in the United Kingdom education should be made a condition of employment. As a step towards this I would suggest that, without interfering with those employed at present, the legislature should enact that, after the expiry of a given time, say two years, young persons applying for employment in factories and other works should be required to enter, in their own handwriting, in a book to be kept at each work for the purpose, their name, age, residence, and date of employment; and, in addition, that they should be able to read, intelligibly, a passage in some simple elementary book, also to be kept at each work for that purpose.

Those young persons failing to satisfy these requirements should, I would venture to suggest, be only allowed to work as half-timers, and be compelled to attend school for the same number of hours as children until they should have acquired the necessary amount of education to entitle them to be employed as young persons.

Were some such plan as this adopted I believe that the most reckless parents, who have no consideration for their children except as mere machines to add to the family earnings, would be the most ready to send their children to school, when made aware they could not otherwise obtain for them employment; and also that the parochial authorities would see it to be their duty, as well as interest, to provide for the education of orphans and children of indigent parents, in order that they might thereby be enabled the sooner to earn their own maintenance.

I may add that I have discussed this question with a great number of persons connected with factories in Scotland, mill owners, managers, &c. I have also conversed upon the subject with clergymen and others who take an interest in the welfare of the working classes, and there appears to be but one opinion as to the advantage that would result from such a measure.

I think it right to state that in visiting, in the course of last autumn, some of the flax wet spinning mills in the valleys in the north of England, it occurred to me that sufficient means had not been adopted for protecting the workpeople from the escape of steam and water, as required by 7 & 8 Vict. c. 15. s. 19; and I propose, with your approval, to pay another visit to the above works, and others of the same class, with the view of enforcing a more rigid observance of the above most important provision of the statute, so essential, in my opinion, to the health and comfort of the workpeople.

I may mention that in other districts with which I am acquainted the floors in flax wet spinning mills are kept completely dry by the means which have been taken to prevent the escape of steam and water; and I have been assured by several mechanics of great skill and intelligence, whom I have consulted upon the subject, that they are not aware of any practical difficulties in the way of adopting and carrying out these necessary precautions.

I have the honour, &c.

Alexander Redgrave, Esq.,
Inspector of Factories.

DANIEL WALKER.

Appendix No. 2.

Return of Informations under the Factories Regulation Acts, &c., in the District of Alexander Redgrave, Esq., for the Six Months ended 31st October 1868.

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	Remarks.
1868.			*In the Sub-Inspectorship of Mr. Coles.*	£ s. d.	£ s. d.	
Sept. 29	James Foran, Monton, Eccles, cotton manufacturer.	H. L. Trafford, Esq., Stipendiary Magistrate, County Police Court, Salford.	Employing one Thomas Wood, a child under the age of 13 years, without having obtained a certificate from a schoolmaster that the said child had attended school as required by the Statute.	1 10 0		
"	" "	" "	Employing the same child before 12 o'clock noon and after 1 o'clock p.m. on the same day.	1 10 0	1 19 0	
"	" "	" "	Employing two young persons without surgical certificates.	1 0 0		One case withdrawn on payment of costs.
"	Thomas Wood, Parent, Eccles.	" "	Neglecting to cause his child, Thomas Wood, the younger, to attend school, whilst employed in a cotton factory.	1 0 0	0 10 0	
Oct. 1	James Holt, woollen printer, Barlow Street, Bury, Lancashire.	Rich. Kay, J. Mellor, and John Scholes Walker, Esqrs., Court House, Bury.	Not producing when required to the Sub-Inspector of the district the school certificates of five children employed by him in his print works.	6 0 0	3 1 6	Two cases withdrawn on payment of costs.
			In the Sub-Inspectorship of Mr. Rickards.			
" 3	John Botterill, Leeds -	J. D. Lucock and T. Tennant, Esqrs., at the Town Hall, Leeds.	Employing seven women after 6 p.m. - -	1 0 0	- -	Six cases withdrawn on payment of costs.

RETURN OF INFORMATIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1868.			*In the Sub-Inspectorship of Mr. Rickards*—cont.	£ s. d.	£ s. d.	
Oct. 3	John Botterill, Leeds -	J. D. Lucock and T. Tennant, Esqrs., at the Town Hall, Leeds.	Employing four women in the night, viz., until 2 o'clock in the morning.	8 0 0	3 5 0	
			In the Sub-Inspectorship of Mr. Oram.			
May 8	The executors of Mr. William Hargraves, Manchester.	Matthew Curtis, Benjamin Nicholls, and S. P. Callender, Esqrs.	Employing five females and young persons after 6 p.m.	5 0 0	3 3 6	
Sept. 4	George Heath, Manchester	R. Fowler, Esq., Stipendiary Magistrate, and B. Nicholls, Esq.	Employing five females during the night - -	6 0 0	2 2 6	Two cases withdrawn on payment of costs.
			In the Sub-Inspectorship of Mr. Lakeman.			
June 20	Balmforth, William, Marshall Hall Mill, Elland, woollen manufacturer.	Sir Henry Edwards, Bart., John Waterhouse, Wm. Hy. Rawson, Esqrs., Major Stansfield, Samuel Shaw, Esq., West Riding Court House, Halifax.	Having employed a child before noon and after 1 o'clock on the same day, viz., 11th June 1868.	1 0 0	0 14 0	
„	„ „	„ „	Having neglected to procure a school certificate for the foregone week, showing that the same child had attended school.	1 0 0	0 14 0	
„	Denham, Thos., operative spinner, Marshall Hall Hill, Elland.	„ „	Having obstructed me in the execution of my duty by sending the child out of the factory, and for having refused to be examined by me.	3 0 0	0 14 0	

RETURN OF INFORMATIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
				£ s. d.	£ s. d.	
1868.			*In the Sub-Inspectorship of Mr. Lakeman*—cont.			
June 20	Holroyd, Samuel, operative spinner, Marshall Hall Mill, Elland.	Sir Henry Edwards, Bart., John Waterhouse, Wm. Hy. Rawson, Esqrs., Major Stansfield, Samuel Shaw, Esq., West Riding Court House, Halifax.	Having obstructed me in the execution of my duty by sending a child, Hart Craven, out of the factory, and for having refused to be examined by me.	3 0 0	0 14 0	
„	Tiffany, John, overlooker of looms, Marshall Hall Mill, Elland.	„ „	Having obstructed me in the execution of my duty by sending a child out of the factory, by name Mary Ann Haigh.	- -	- -	Dismissed because I had spoken to the child, and because defendant offered no obstruction in getting her back.
Oct. 31	Messrs. Horsfall and Co., Delph Mill, Luddenden Foot, cotton spinners.	John Waterhouse, Wm. Hy. Rawson, Joshua Appleyard, Esqrs. Captain Rothwell, West Riding Court House, Halifax.	Having employed two females after 6 o'clock in the evening of the 25th September.	2 0 0	1 6 0	Several persons were found at work, but two cases were deemed to be sufficient for a prosecution.
"	Thomas Bates, blacksmith, Clough June, Mixenden.	„ „	For having permitted the illegal employment of his child in a factory, at the age of seven years and five months.	- -	0 12 6	Penalty not pressed for, on account of the poverty of defendant.
„	Thornton, Henry, Albert Mill, Rastrick, worsted spinner.	„ „	For having employed 10 females, young persons and children after 6 o'clock at night, to wit, till seven minutes after 6.	- -	- -	Dismissed, because the time was checked by the office clock at the Railway Station, and not by the outside clock, and on account of conflicting evidence.

RETURN OF INFORMATIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1868.			*In the Sub-Inspectorship of Mr. Chaytor.*	£ s. d.	£ s. d.	
May 19	Palmer's Shipbuilding and Iron Company, Limited and Reduced, Jarrow on Tyne.	W. Anderson, T. Drewett Drewett, D. O. Drewett, Esqrs.	Employing a child more than 6 hours and thirty minutes or 7 hours per day.	1 0 0	1 19 0	Appealed to a Superior Court.
Aug. 31	Messrs. Lishman and Co., Lustrum Iron Works, Stockton on Tees.	Dr. Richardson, Bennington.	Employing a child without a surgical certificate -	2 0 0	1 16 0	
"	" "	" "	Employing a child more than 6 hours and 30 minutes.	1 0 0		
			In the Sub-Inspectorship of Mr. Cullen.			
Aug. 3	Alexander Gilchrist, flax and tow spinner, Rowes Mill, Leslie.	Court House, Kirkcaldy, before Henry Burridge and John Neill M'Leod, Esqrs.	Employing a woman after 6 p.m. - - -	1 0 0	2 8 10	
"	" "	" "	Employing a woman after 6 p.m. - - -	1 0 0		
"	" "	" "	Employing a woman after 6 p.m. - -	1 0 0		
" 19	James Morrice, wool spinner, Blairgowrie.	Blairgowrie, before Alex. Buchan and Thos. Mitchell, Esqrs.	Employing a child for more than 6½ hours a day -	1 0 0	0 10 0	
"	" "	" "	Employing the same child without certificate of attendance at school.	1 0 0		

RETURN OF INFORMATIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1868.			*In the Sub-Inspectorship of Mr. Osborn.*	£ s. d.	£ s. d.	
Sept. 9	John Smith and Co., cotton manufacturers, Albert Mill, Nelson.	Thomas Thornber England and William Farrer Ecroyd, Esqrs., Colne.	Employing 12 women and young persons after 6 o'clock p.m.	18 0 0	7 10 0	
„ 24	James Hindle, cotton manufacturer, Victoria Mill, Clayton-le-Moors.	J. Grimshaw and J. Ingram, Esqrs., Accrington.	Employing 12 women, young persons and a child during the dinner-hour.	4 0 0	3 18 0	Eight cases withdrawn on payment of costs.
Oct. 1	John Walsh, cotton manufacturer, Atlas Mill, Over Darwen.	Richard Eccles, Esq., and the Rev. Messrs. Graham and Greenway, Over Darwen.	Employing 11 women, young persons and children during the dinner-hour.	2 0 0	6 6 0	Nine cases withdrawn on payment of costs.

Appendix No. 3.

Accidents in Factories, Bleachworks, &c., and Works under the Provisions of the Acts of 1864 and 1867.

Table No. I.—*Accidents arising from Machinery.*

Nature of Injury.	Adults.		Young Persons.		Children.		Total.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.&F.
Causing death	10	1	8	–	–	2	18	3	21
Amputation of right hand or arm	5	5	1	1	1	–	7	6	13
Amputation of part of right hand	38	19	28	21	6	9	72	49	121
Amputation of left hand or arm	8	2	7	1	–	–	15	3	18
Amputation of part of left hand	30	10	21	12	8	6	59	28	87
Amputation of leg	1	–	1	–	–	–	2	–	2
Fracture of limbs or bones of trunk	17	7	28	3	4	2	49	12	61
Fracture of hand or foot	25	12	6	23	8	4	39	39	78
Injuries to head and face	15	20	24	3	5	1	44	24	68
Lacerations, contusions, and other injuries not enumerated above	260	127	263	160	69	29	592	316	908
Total	409	203	387	224	101	53	897	480	1377

Table No. II.—*Accidents not arising from Machinery.*

Nature of Injury.	Adults.		Young Persons.		Children.		Total.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.&F.
Causing death	19	1	10	1	2	–	31	2	33
Amputation of right hand or arm	–	–	–	–	–	–	–	–	–
Amputation of part of right hand	23	–	4	–	–	–	27	–	27
Amputation of left hand or arm	4	–	–	–	–	–	4	–	4
Amputation of part of left hand	7	–	3	1	–	–	10	1	11
Amputation of leg	3	–	2	–	–	–	5	–	5
Fracture of limbs or bones of trunk	70	2	19	1	4	2	93	5	98
Fracture of fingers	29	–	5	–	–	–	34	–	34
Injuries to head and face	60	6	50	3	12	2	122	11	133
Lacerations, contusions, and other injuries not enumerated above	826	15	192	18	13	3	1031	36	1067
Total	1041	24	285	24	31	7	1357	55	1412
Total number of acidents reported	1450	227	672	248	132	60	2254	535	2789

Appendix No 4.

List of the Workshops under the Workshop Regulation Act, 1867, visited by the Sub-Inspectors of Factories in the district of Mr. A. Redgrave, during the six months ended the 31st October 1868.

By Mr. Sub-Inspector Coles.

Millinery, &c., Establishments.

June 11. James Rodgers, Dacre Bridge, Manchester.
M. M. Smith and Son, Strangeways, Manchester.
Smith and Hair, Strangeways, Manchester.
H. Bowen, Oxford Street, Manchester.
J. Owen, Oxford Street, Manchester.
J. Robinson and Son, Oxford Street, Manchester.
Mrs. Bartleet, Oxford Street, Manchester.

Brickfields.

July 8. Howe and Lee, Cheetham, Manchester.
H. Pimlott, Cheetham, Manchester.
G. Bradbury, Cheetham, Manchester.
J. Mycocks, Elizabeth Street, Manchester.
G. Tronter, Red Bank, Manchester.
M. Mulley, Red Bank, Manchester.
W. Robinson, Waterloo Road, Manchester.
G. Warmishaw, Waterloo, Road Manchester.
S. Irlam, Waterloo Road, Manchester.
W. Higgins and Son, Cheetham, Manchester.
W. Rowbottom, Queen's Road, Manchester.
G. Ollier, Cheetham, Manchester.
M. Beaumont, Higher Broughton, Manchester.

July 17. William Whitley, Pendleton, Manchester.

By Mr. Sub-Inspector Rickards.

June 16. S. Stell, Paper Tube Maker, Bingley.
July 24. Mrs. Ambler, Paper Tube Maker, Keighley.

By Mr. Sub-Inspector Henderson.

Mr. F. Fisher, Trimming Manufacturer, Hoxton.

By Mr. Sub-Inspector Lakeman.

May 1. Messrs. Blagborough and Co., Crown Street, Halifax.

Messrs. Nicholson and Co., Crown Street, Halifax.
Miss Hull, Old Market, Halifax.
Miss Nelson, Trinity Road, Halifax.

May 6. Messrs. Pemson and Co., Crown Street, Halifax.
Messrs. Hinchliffe and Co., Silver Street, Halifax.
Messrs. Foster and Co., Crown Street, Halifax.
Messrs. Pigg and Co., Old Market, Halifax.
These are the principal drapers, dressmakers, and milliners, in the town; there are 32 smaller ones.

May 14. Messrs. Barker and Co., Wood Top, Hebden Bridge.
Mr. Joseph Crowther, Hebden Bridge.
Mr. Thomas Sutcliffe, Hebden Bridge.
These are wholesale clothiers of fustian.

June 18. Two Ropemakers near Todmorden, names not entered, and forgotten; but abstracts were given to them.

August 12. Mr. James Nutton, West Vale, Greetland;
Mr. Thomas Whiteley, West Vale, Greetland;
Cotton Warp Winders.

August 17. Mr. Lightowler, Carpet Maker, Wade Street, Halifax.
Miss Vernon, Milliner, Wade Street, Halifax.

By Mr. Sub-Inspector Paget.

May 27. A. C. Denison, Dressmaker, Bradford.

By Mr. Sub-Inspector Osborn.

July 24. J. Myers, Ropemaker, Haslingden.
July 31. — Myers, Ropemaker, Padiham.
August 7. H. Myers, Ropemaker, Clitheroe.
August 21. James Gott, Ropemaker, Nelson.
September 28. J. Hurt, Ropemaker, Blackburn.

By Mr. Sub-Inspector Oswald.

May 1. Mr. Walker, Little Toll Street, Nottingham. Lace clipping.
Mrs. Holmes, Alfreton Road, Radford. Lace clipping.
Mr. Hackett, Alfreton Road, Radford. Lace clipping.

John Key, Alfreton Road, Radford. Guide maker.
Louisa Sinkins, Alfreton Road, Radford. Lace clipping.
Mrs. Davis, Forest Side, Radford. Lace clipping.
Mrs. Goodall, Mitchell Street, Radford. Lace clipping.
Mrs. Pollard, Bloomsgrove Street, Radford. Lace clipping.
Mrs. Turner, Bloomsgrove Street, Radford. Lace clipping.
Mrs. Lynch, London Road, Nottingham. Lace clipping.
Mrs. Eaton, Leen Side, Nottingham. Lace clipping.
James Rowell, Harrington Street, Nottingham. Lace clipping.
Leopold Hamel, Stoney Street, Nottingham. Lace warehouse.
William Lockwood, Saint Mary's Gate, Nottingham. Lace warehouse.
Jones and Woolley, Saint Mary's Gate, Nottingham. Lace warehouse.

May 5. Unsworth and Thacker, Siddall's Road, Derby. Gymp warehouse.
John Leavesley, Normanton Street, Nottingham. Lace dresser.
Edwin Meats, Isabella Street, Nottingham. Lace dresser.

May 6. Alexander Onion, Sherwood Street, Nottingham. Lace clipping.
Samuel Smith, Clumber Street, Nottingham. Lace clipping.
Mrs. Wilson, Woodhouse Yard, Notingham. Lace clipping.
Mrs. Stevenson, Woodhouse Yard, Nottingham. Lace clipping.
J. Pinner and Co., Woodhouse Yard, Nottingham. Box makers.
S. I. King, Riste's Place, Nottingham. Box maker.
W. J. Hopcroft, Walker Street, Sneinton. Frame smith.
Mrs. Wheatley, West Street, Sneinton. Lace clipping.
Mrs. Giles, West Street, Sneinton. Lace clipping.

F. H. Webster, George Street, Sneinton. Lace dresser.
Wright and Mulholland, George Street, Sneinton. Lace dresser.
James Kirkham, George Street, Sneinton. Lace dresser.
William Howitt, Dakeyne Street, Sneinton. Lace dresser.
John Blasdale, Dakeyne Street, Sneinton. Machinist.

May 12. Mrs. Bradbury, Old Street, Nottingham. Lace clipping.
Mrs. Watson, Union Road, Nottingham. Lace clipping.
Mrs. Brown, Pelham Street, Nottingham. Milliner, &c.
Leeson and Lacey, Pelham Street, Nottingham. Milliners, &c.

May 13. Fernyhough, Sen., Wardwick, Derby. Tailors.
G. R. Barber, Eagle Works, Derby. Paper bags.
C. J. Storey, Green Lanes, Derby. Candles.

May 14. Taylor and Whitchurch, Warser Gate, Nottingham. Lace warehouse.
Clubley and Brown, Clumber Street, Nottingham. Milliners, &c.
R. Barrett, Pelham Street, Nottingham. Milliners, &c.
Jones, Wooley and Co., Marygate, Nottingham. Lace warehouse.
Charles Redfern, Broadway, Nottingham. Lace warehouse.
William and Marr, Broadway, Nottingham. Lace warehouse.
H. Carey, Stoney Street, Nottingham. Lace warehouse.
Geo. Liberty, Stoney Street, Nottingham. Lace warehouse.

May 15. Mrs Jenkins, Brown's Croft, Barford. Lace drawing.

May 19. Mrs. Topham, Hollow Stone, Nottingham. Lace clipping.

May 29. Mr. Kirk, South Parade, Nottingham. Milliner, &c.
Thomas Marshall, Poplar, Nottingham. Lace clipping.

May	29.	William Marshall, Poplar, Nottingham, Lace clipping.
		Mrs. Stones, Poplar Court, Nottingham. Lace clipping.
June	8.	William Terry, Carlton Hill, Nottingham. Bricks.
		William James, Carlton Hill, Nottingham. Bricks.
		Nottingham Patent Brick Co., Carlton Hill, Nottingham. Bricks.
June	10.	Mr. Hill, Woodborough, Nottingham. Bricks.
June	11.	John Sutton, City Road Mill, Derby. Saw mill.
		Norton and Co., Babington House, Derby. Drapers, &c.
June	12.	C. Yates, Marygate, Nottingham. Lace warehouse.
		Bradbury, Bros., Marygate, Nottingham. Lace warehouse.
		Leopold Hamel, Stoney Street, Nottingham. Lace warehouse.
		Barnett and Richards, Marygate, Nottingham. Lace warehouse.
		W. J. Clarke, Marygate, Nottingham. Lace warehouse.
		R. H. Hopcroft, Marygate, Nottingham. Lace warehouse.
		J. Spray and Co., Marygate, Nottingham. Lace warehouse.
July	30.	Miss Richardson, North Street, Sneinton. Hosiery.
July	4.	Jefferson and Farmer, Corn Market, Derby. Milliner, &c.
		Lesson and Lacey, High Street, Nottingham. Milliners, &c.
		Mr. Sporton, Rigley's Yard, Nottingham. Lace clipping.
		Daft and Jessop, Long Row, Nottingham. Milliners, &c.
July	17.	William Marshall, Queen Street, Basford. Lace clipping.
July	25.	Samuel Lowe, Agard Street, Derby. Gymp.
July	29.	Mr. Jackson, Bargate, Boston. Ladies' clothing.
August	5.	Sowerby and Co., Victoria Street, Grimsby. Oil cake.

August	7.	Mr. Welch, Nun Street, Derby. Boot laces.
		Saml. Lowe, Nun Street, Derby. Gymp.
August	8.	W. Bancroft, Depot Mill, Derby. Gymp.
		Smith and Harper, Depot Mill, Derby. Gymp.
August	14.	Thomas Stenson, Stockbrook Street, Derby. Gymp.
September	30.	Brown, Whitney, and Co., Pavement, Nottingham. Boxmakers.

REPORT of ROBERT BAKER, Esq., Inspector of Factories, for the six months ended the 31st of October 1868.

Factory Inspectors' Office, Whitehall,
SIR, 31*st October* 1868.

I have now the honour to report to you on the operation of the Factory Act Extension Act, 1867, which, though found to be very extensive, is not beyond, if it is equal to, what was anticipated.

This Act became law on the 15th of August 1867, and I at once proceeded to re-arrange my division, in order to ascertain as soon as possible, how many new sub-inspectors would be required for the increased work which it would throw upon it.

And I must say it was a most perplexing task to answer offhand what assistance might be needed, when there had been very insufficient details (almost none in fact) collected, even for the evidence to be the basis of the law, either of the number of factories to be visited in future, or of the persons employed in them.

The newest directories offer apparently the readiest sources of information, but these are rarely published annually; and, whether they are or not, they only show how ephemeral trade is, and how expectantly vast numbers of people begin business only to disappear before a fresh edition is called for. Thus hundreds of circulars may be needlessly sent to firms that exist no longer; dozens are thrown aside as impertinent and troublesome, and have again to be renewed. Many are returned from the Post Office endorsed, "Gone; left no address."

It was only, however, by the help of such directories as could be obtained, and by the kind assistance of my old staff, and that of the certifying surgeons already appointed to different districts, that I was enabled at all to estimate my necessities in this respect. The response, however, with which you kindly met my estimate, has supplied my sub-divisions fairly and well. And that has followed which I had anticipated, namely, by reducing the travelling of each gentleman, his ability to visit more works has been greatly increased. I had formerly eleven sub-inspectors; with the

addition of nine others my staff has been completed; so that as yet there has not fallen on the Treasury from the Factory Act Extension Act, such an enormous amount of additional expense, as was previously anticipated, nor has there been such an army of inspectors needed, as was thought probable.

The appointment of an assistant-inspector to superintend, in aid of the inspector-in-chief, such districts as it would have been impossible for him to have visited, from their distance only, as well as from his increased duties generally, was a happy idea in more ways than one. It relieved the inspector-in chief of an amount of work under which the former system of personal inspection by him must have broken down; and it gave promotion to two gentlemen, who had deserved it by long and effective services. I do not desire to exaggerate my own labours during the seven months between August and the end of March. Questions came at the rate of 100 a day for several weeks; questions of trade, of policy, of doubt, of anxiety,—which had then to be answered by my own hand, as I had no sub-clerk. The new law, more difficult than all the other factory laws we have had to administer, had to be learnt, and communicated to the sub-inspectors and the manufacturers. The old works had also to be kept duly visited and kept in order, and certifying surgeons had to be appointed to new districts, and to be informed of their duties. In the midst of all this a half-yearly report had to be written, and facts gathered and collected for another. Mr. Baines's Return of textile works was added to this multitudinous labour. Finally, a certain amount of travelling had to be performed to explain the law to manufacturers at public meetings, to the occupiers of new works also who were lost in the intricacies of sections and modifications, and to factories and workshops, and particularly to works where, orders having been taken, they had to be executed by a given time. The labour of one head and one pair of hands cannot even be imagined; but the anxiety and responsibility may in some degree.

The Act has of course greatly increased the numbers of workers under supervision; and this increase would have been much greater if the "bad state of trade" in all branches of industry, had not enabled the employers in the beginning of the year, temporarily to dismiss from their service nearly all children under eleven years of age, to turn them adrift in fact,—and thus to repudiate the duty of educating the younger hands, which, though it really belongs to the parent, is still in a great measure under the influence

of the employers, if it is not their proper office in a public sense. Nevertheless, the Act has shown itself, as initiating a moral obligation at least upon the employers of juvenile and female labour, in rendering it uniform in its hours; and thus bringing within the ordinary reach of those who have already made some advances in elementary knowledge either independently of factory labour or in connexion with it, various institutions for intellectual purposes, hitherto languishing for want of pupils, in consequence of their hours of work preventing them from, or unfitting them for, enjoying the privileges such institutions were intended to afford.

Undoubtedly, the Textile Factory Acts embodied in the Act of 1867, notwithstanding their previous success in the fictile districts, have been put upon their trial; nor can we be surprised that a question should have arisen in many minds whether Acts originally for textile works only, would be found adequate for every trade, so as to bring all under one form of discipline. Faith in a universal law of this kind would have been great indeed if it could have been supposed to be thus perfect. The modifications which the Act contains, both permanent and temporary, show that contingent exigencies had been foreseen and provided for; since it was scarcely possible but that fictile and metallurgic trades should possess constitutional elements widely differing from those of textile trades; the habits of the people being also different, their indulgences different, their expenditure different, themselves not yet accustomed to compulsion of any kind, and open only to the slowest and most careful approaches.

That it has met and conquered most of these and many such obstacles so remarkably as probably to require but few of its modifications to be retained hereafter, is a sufficient proof of the soundness of this kind of legislation; the danger from which lay, not only in the number of these modifications, but in the desires which they naturally evoked amongst so many kinds of employers to evade the restrictions of the Act without a trial. Relaxations of any restrictions granted to a class of trades could not fail of producing a host of claimants for the same privileges from other classes of trades, very difficult to be denied them on manipulative arguments based on official experience; and with a conviction throughout that, if the law was to be relaxed for all, any hopes of the advantages to be gained by a general restriction of the hours of labour, would have to be abandoned.

Take for example the thousand and one trades carried on in such a place as Birmingham, where the domestic habits of

the workers in respect of their employments, their general arrangements and associations, their laissez aller, had all been uncontrolled by any legal discipline down to the 1st of January 1868,—where, from six to six, seven to seven, eight to eight, nine to nine, or even 10 and later, had been the hours of labour, varying by half hours and quarters as trade vacillated with the execution of orders instantly or otherwise,—where perhaps as much midnight toil by employers as well as workers went on, especially among the smaller workshops, and in the houses of the workers, as human nature could well sustain,—where so many married women were and are yet employed away from their homes and families, and where the custom of leaving all social comforts to chance or opportunity had become perpetual rather than accidental, and the difficulty of entering on a contest with such habits, or of attempting to persuade all the persons whose feelings and interests were to be affected by that change, that it would be far better for their physical and moral health than heretofore, and that their longevity, as well as their social comforts, depended on a regard to sanitary laws which had never hitherto been respected by them, may be imagined. What prejudices to overcome!—what a rearrangement of plans and propositions to effect. And yet, I have little doubt but time will show, (judging by past experience, partial as it may have yet been in these new fields of labour, but fully borne out in the old,) that, the former results will follow the trial, viz., masters as well as workers wondering how they ever formerly submitted to long hours, now that they can rejoice in earlier ones which have given them the glorious fresh air in the summer evenings, and the additional glory of intellect advanced, in the scientific institutions of the winter.

After the passing of the Act, my first effort was to learn it thoroughly myself, and then, to draw out special provisions for different trades containing the points affecting such trades individually, without the occupiers having to refer continually to the abstract which it was legally necessary should be distributed to each of them, in conformity with the 27th section, 3 and 4 W. IV. c. 103. I then summoned all my old staff to a conference at Leamington, in order that we might carefully go through each provision separately; and thus, understanding each others' minds, might act in unison, when it became our duty to put the Act in force. A copy of one of these special provisions relating to letter-press printing is here given.

No. 11.—Special Provisions of the Factory Act Extension Act, 1867, applicable to any Premises in which Letter-Press Printing is carried on.

1.—*Children's work—children over eleven years of age.*

Till the 1st of July 1868, children of eleven years of age may be employed from 6 a.m. to 6 p.m. on every working day in the week but Saturday, less an hour and a half for meals.—F.A.E.A. 1867, Sched. s. 1., 7 Vict. c. 15. s. 36.

2.—*Children over twelve years of age.*

Till the 1st day of July 1870, children of twelve years of age may be employed from 6 a.m. to 6 p.m. on every working day but Saturday, less an hour and a half for meals.—F.A.E.A., 1867, Sched. s. 2., 7 Vict. c. 15. s. 36.

3.—*Saturday work of children, young persons, and women.*

Till the 1st day of January 1869, children, young persons, and women may be employed till half past 4 p.m.—F.A.E.A., 1867, Tem. Mod., s. 3.

4.—*Saturday afternoon.*

The clauses of the Factories Acts which forbid the employment of women and young persons on any Saturday after 2 p.m. do not apply to any woman or female young person whose hours of work have not exceeded eight in any day of that week.—F.A.E.A., 1867, Per. Mod., s. 23.

5.—*Night work.*

Male young persons may be employed in the night, subject to the same intervals of rest which they are allowed during the day but not on any day preceding or succeeding such night work, nor for more than 6 nights in a fortnight.—F.A.E.A., 1867, Per. Mod., s. 17.

6. *Register of overwork to be kept.*

When any child, young person, or woman is employed on any day for a longer period than is allowed by the Factory Acts (*i.e.*, for more than $10\frac{1}{2}$ hours on five days and for more than $7\frac{1}{2}$ hours on Saturday), the day on which and the period during which he or she is so employed shall be entered by the occupier of a Factory in a Register in such Form as the Inspector of Factories shall direct.—F.A.E.A., 1867, Per. Mod. s. 15., 7 Vict. c. 15., s. 27.

7.—*Employment of male young persons above sixteen years of age, alternate days, or during the night, or on alternate weeks.*

Male young persons of 16 years of age and upwards may be employed fifteen hours a day, between 6 a.m. and 9 p.m., or if the ordinary hours of work have been altered to between 7 a.m. and 7 p.m. or 8 a.m. and 8 p.m., then they may be employed those fifteen hours, less meal times, between 7 a.m. and 10 p.m., or 8 a.m. and

11 p.m., but they must be allowed an additional half hour for meals after 6 p.m., and they can only be employed fifteen hours a day on alternate days; and in the weeks in which they are employed on such alternate days they must be allowed one whole holiday or two half holidays of half a day each. Such young persons may work during the night on alternate weeks, *i.e.*, between the hours of 1 a.m. on Monday and 11 p.m. on the following Saturday, but they must not work more than 11½ hours at any one time, less meal times of an hour and a half, and there must be twelve hours interval between each employment, and the total number of hours of work in any one week must not exceed 60.—F.A.E.A., 1867, Per. Mod. s. 13.

Till the 1st of July 1870 male young persons of sixteen years of age may be employed as men.—F.A.E.A., 1867, Sched., s. 6.—The occupier is liable to proof of their being 16.—7 Vict. c. 15., s. 94.

8.—*Sunday work.*

No child, young person, or woman shall be employed on any Sunday.—F.A.E.A., 1867, s. 7.

9.—*Meals.*

Workers may take their meals in any room, notwithstanding a manufacturing process be then going on; and whether or not at the same time as other workers.—F.A.E.A., 1867, Per. Mod., s. 16, 7 Vict. s. 36.

10.—*Holidays.*

The Holiday clauses of the Factory Acts, so far as they apply to male young persons, and all the clauses which forbid their employment after 2 p.m. on Saturday, do not apply to male young persons employed in day and night turns, changing every alternate week.—F.A.E.A., 1867, Per. Mod., s. 23.

11.—*Fencing dangerous machinery.*

The Secretary of State may modify the clauses of the Factory Acts with reference to the fencing off of dangerous machinery in such manner as he may think fit.—F.A.E.A., 1867, Per. Mod., s. 24.

12.—*Lime-washing.*

The lime-washing and washing of factories clauses of the Factories Acts are not enforceable in factories for letter-press printing; but due cleanliness and ventilation must be maintained; and special rules may be made by the occupier, as to the due performance of his instructions to his workpeople in this respect.—7 Vict. c. 15. s. 18, F.A. E.A., 1864, ss. 4, 5; F.A.E.A., 1867, ss. 9, 10.

The number of these "special provisions" amounted to 16, and were printed and sent out with the books and abstracts, having been provided at the outset by the office.

It thus became much less difficult for each occupier to ascertain his own share in the law than, if he had had to travel over a huge abstract four feet by two or thereabouts in size, to find it. Then followed the framing other notices and books, required to be kept and hung up under certain conditions of employment; the organization of the districts; the settlement of new boundaries; the removal of such Sub-Inspectors to new locations as had a desire to change; and, eventually, after some weeks of travelling with the old ones, to place the new appointees in their districts also. This task of organization, of maintaining the old visitations intact, of instructing new men, unaccustomed either to the law or to such duties as they had at once to perform, of issuing from four to five thousand sets of books and abstracts, of inventing, printing, and distributing notices and directions, and of answering the correspondence of a district as large as mine without residential assistance, of going here and there at a moment's notice to explain the law, and returning to the piles of letters of inquiry which had accumulated during my absence, and of being for many weeks both Inspector and Sub-Inspector for some of the new districts, was laborious enough: and I owe to Mr. Stepney, the clerk of the London office, and to the messenger also, many thanks for their unflagging assistance in issuing the books, abstracts, and provisions, and especially to the former, in obtaining for me the necessary printed matter which I required, amongst all his other duties.

My division consists of the following sub-divisions, all which are under my exclusive care with the exception of those of North and South Ireland, Preston, Liverpool, and South Wales, which are allotted under my sanction to Mr. Ewings, who resides at Preston with my approval.

Mr. Baker's Division and Sub-Divisions.

Assistant-Inspector Jos. Ewings, Esq., Preston.

Mr. Ewings has personal charge over the districts with an asterisk.

District.	Sub-Inspector.	Residence.	Counties under his Charge.	No. of Works.	Average Annual Mileage.	Average Annual Cost of Visitation. £ s. d.
North Wales	S. S. Kent	Llangollen	Anglesea, Cardigan, Carnarvon, Denbigh, Flint, Merioneth, Montgomery, Radnor.	370	7,200	210 0 0
Bolton	D. Jones	Bolton	Parts of Lancashire and Yorkshire.	653	5,325	163 16 0
Stockport	T. Steen	Stockport	Cheshire	750	6,179	161 13 10
Devon	G. F. Buller	Frome	Somerset, Cornwall, and part of Devon.	489	10,800	209 6 8
North Stafford	Capt. May, R.N.	Stoke-upon-Trent.	Part of Stafford	563	2,360	45 18 6
Leicester	C. N. Girardot	Leicester	Bedford, Leicester, Northampton, and Rutland.	624	7,500	90 0 0
Worcester	E. B. Fitton	Worcester	Worcester, Hereford, part of Salop, and Monmouth.	467	8,646	160 4 5
Gloucester	H. G. Earnshaw	Berkeley	Gloucester, Wilts	597	10,093	276 13 7
Hants	W. H. Beadon	Axminster	Part of Devon, Hants, and Dorset.	508	5,511	52 13 9
*Preston	G. T. Faussett	Preston	Westmoreland, Cumberland, and part of Lancashire.	500	4,200	110 0 0
West Bromwich.	G. I. S. Blenkinsopp.	WestBromwich	Part of South Stafford	309	2,702	101 10 7
South Birmingham.	W. H. Johnston	Birmingham	Part of Warwick	485	644	57 4 3
*North Irish	W. D. Cramp	Belfast	North of Galway & Drogheda	600	4,830	101 19 6
North Birmingham.	Thurlow Astley	Birmingham	Part of Warwick	698	634	22 18 2
*South Irish	J. H. Bignold	Dublin	South of Drogheda & Galway	536	6,045	138 13 4
*South Wales	T. P. Mostyn	Swansea	Pembroke, Carmarthen, Glamorgan, and Brecknock.	379	6,082	147 2 0
Coventry	Otto Striedinger.	Coventry	Part of Warwick and Oxford.	700	4,500	135 0 0
*Liverpool	C. R. Bowling	Liverpool	Part of Lancashire	605	3,536	76 0 0
Wolverhampton.	G. Hudson	Wolverhampton.	Part of South Stafford	450	2,500	80 0 0
Berks	Vacant	Reading	Berks, Bucks, Herts, and part of Salop.	200	4,000	90 0 0
				10,483	103,287	

The two last districts are estimates as to mileages and costs, Mr. Darkin having been compelled to resign Wolverhampton from ill health, without having travelled over it; and the Reading Sub-Inspector having the additional duty of inspecting other districts when temporarily vacant.

The number of factories in each district is also greater than is shown in the following tables, 183 returns having come in since the tables were completed.

The following tables give the industries of my division under the Factory Acts Extension Act, 1867, exclusively, to the 31st October 1868.

First, in the form of a general summary of works.

Second, in a summary of works in counties in my division of England and in Wales.

Third, a detail of trades in all the counties.

Fourth, a detail of works in each of the counties separately.

Fifth, sixth, and seventh, the same information for Ireland.

SUMMARY OF WORKS known to be up to the date of this Report, under the Factory Acts Extension Act, 1867, in the Western Division of England, in Wales, and in Ireland.

TABLE No. 1.

GENERAL SUMMARY of WORKS in the Western Division of England and Wales, and Ireland.

	Number of Firms.	Horse-Power employed.		Persons employed.								Total.
				Adults.		Young Persons.		Children.		Total of both Sexes.		
		Steam.	Water.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
England & Wales	5,084	103,573	8,577	211,625	31,158	48,846	13,683	11,170	2,775	271,641	47,616	319,257
Ireland - -	494	3,051	716	16,175	4,783	4,251	1,684	416	70	20,842	6,537	27,379
Total - -	5,578	106,624	9,283	227,800	35,941	53,097	15,367	11,586	2,845	292,483	54,153	346,636

TABLE No. 2.

SUMMARY of COUNTIES in the Western Division of England and Wales.

Counties.	Number of Firms.	Horse-Power employed.		Persons emyloyed.								Total.
				Adults.		Young Persons.		Children.		Total of both Sexes.		
		Steam.	Water.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
nglesea - -	10	81	6	311	—	51	—	1	—	363	—	363
edford - -	50	378	—	1,116	1,627	212	304	17	—	1,345	1,931	3,276
erks - - -	57	494	262	1,340	345	252	102	30	6	1,622	453	2,075
recon - -	9	108	121	143	15	32	9	9	—	184	24	208
ucks - -	53	616	386	1,826	448	367	221	85	34	2,278	703	2,981
rdigan - -	9	18	—	50	—	11	—	—	—	61	—	61
rmarthen -	40	2,325	1,214	7,530	671	1,787	670	656	96	9,973	1,437	11,410
rnarvon -	19	393	188	1,188	3	217	1	71	—	1,476	4	1,480
ester - -	237	3,774	195	14,389	936	2,447	389	602	162	17,438	1,487	18,925
rnwall - -	120	602	243	1,574	82	501	38	17	10	2,092	130	2,222
mberland -	66	2,430	111	2,830	108	647	105	59	26	3,536	239	3,775
nbigh - -	33	1,391	133	1,106	56	301	20	98	—	1,505	76	1,581
rby (part of) -	2	7	—	31	3	10	1	3	—	44	4	48
von - -	240	1,720	467	2,595	525	741	136	78	19	3,414	680	4,094
rset - -	44	268	27	643	42	199	8	26	8	868	58	926

SUMMARY OF COUNTIES—*continued.*

Counties.	Number of Firms.	Horse-Power employed.		Persons employed.								Total.
				Adults.		Young Persons.		Children.		Total of both Sexes.		
		Steam.	Water.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
Flint - -	35	945	312	2,239	76	322	20	33	19	2,594	115	2,709
Glamorgan - -	147	12,328	526	13,501	897	2,776	857	800	105	17,077	1,859	18,936
Gloster - -	182	3,326	401	7,034	1,885	1,773	753	302	147	9,109	2,785	11,894
Hants - -	130	394	144	1,746	136	469	51	38	—	2,253	187	2,440
Hereford - -	17	62	4	184	4	42	1	6	3	232	8	240
Herts - -	49	259	55	646	642	216	93	65	7	927	742	1,669
Lancaster -	705	18,341	368	40,236	3,651	7,579	1,638	1,659	240	49,474	5,529	55,003
Leicester - -	107	430	38	2,356	1,087	761	488	164	136	3,281	1,711	4,992
Merioneth -	13	188	355	2,103	—	282	—	110	—	2,495	—	2,495
Monmouth - -	61	4,777	565	8,300	517	1,515	329	498	30	10,313	876	11,189
Montgomery -	11	158	258	485	54	95	33	28	10	608	97	705
Northampton -	64	597	25	2,811	558	659	354	99	96	3,569	1,008	4,577
Oxford - -	54	314	221	832	154	305	11	48	2	1,185	167	1,352
Pembroke - -	7	114	—	244	1	45	—	1	—	290	1	291
Rutland - -	1	—	—	2	—	1	—	—	—	3	—	3
Salop - -	44	1,098	76	3,356	255	670	46	218	55	4,244	356	4,600
Somerset - -	168	757	521	4,100	1,324	833	363	198	177	5,131	1,864	6,995
Stafford - -	799	28,981	346	44,611	3,741	10,923	1,763	2,523	249	58,057	5,753	63,810
Warwick - -	1,177	10,210	156	26,639	9,380	8,516	4,125	1,893	911	37,048	14,416	51,464
Westmoreland -	28	287	238	757	303	150	101	100	44	1,007	448	1,455
Wilts - -	50	773	83	2,380	91	523	47	26	11	2,929	149	3,078
Worcester -	238	4,596	468	10,306	1,534	2,599	606	594	171	13,499	2,311	15,810
Yorks (part of) -	8	33	64	85	7	17	—	15	1	117	8	125
Total - -	5,084	103,573	8,577	211,625	31,158	48,846	13,683	11,170	2,775	271,641	47,616	319,257

Table No. 3.

Summary of Trades.

Kinds of Trades.	Horse-Power employed.		Persons employed.								Total.
			Adults.		Young Persons.		Children.		Total of both Sexes.		
	Steam.	Water.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
Ammunition -	94	75	268	288	12	136	4	—	284	424	708
Anchors - -	109	—	100	—	47	—	2	—	149	—	149
Anvils and vices	168	12	331	—	87	—	1	—	419	—	419
Awl-blades -	34	—	105	5	17	6	6	—	128	11	139
Axles - -	212	10	419	3	66	2	12	—	497	5	502
Bedsteads -	236	—	1,021	335	379	62	80	3	1,480	400	1,880
Bellows - -	8	—	6	2	12	—	—	—	18	2	20
Bells - -	20	—	99	9	46	7	10	—	155	16	171
Birdcages - -	3	—	10	4	8	1	—	—	18	5	23
Blacking -	—	—	11	13	2	13	—	5	13	31	44
Bobbins - -	265	218	566	44	159	30	112	5	837	79	916
Boilers - -	391	—	1,397	4	359	1	198	—	1,954	5	1,959
Bolts, rivets, &c.	1,517	—	2,528	1,270	949	427	576	70	4,053	1,767	5,820
Bookbinders -	1	—	318	171	181	116	20	27	519	314	833
Book-clasps -	11	—	71	93	23	18	9	5	103	116	219
Boots and shoes	171	—	4,272	2,812	1,355	1,111	242	274	5,869	4,197	10,066
Brass finishing -	3	—	30	6	16	2	5	—	51	8	59
Do. ornaments	—	—	15	—	3	—	2	—	20	—	20
Do. plating -	—	—	2	2	4	6	—	—	6	8	14
Do. taps - -	20	—	136	18	47	9	22	3	205	30	235
Braziers - -	20	—	225	38	85	5	12	1	322	44	366
Breakwater builder.	—	—	150	—	12	—	—	—	162	—	162
Brewers - -	121	—	411	—	32	—	2	—	445	—	445
Bricks and tiles	1,334	—	1,876	455	523	428	186	25	2,585	908	3,493
Bridge builder -	20	—	250	—	20	—	30	—	300	—	300
Britannia metal	24	—	53	29	22	21	3	—	78	50	128
Brushes - -	16	—	151	21	40	12	13	1	204	34	238
Buckles - -	35	—	103	63	114	52	19	10	236	125	361
Builders - -	20	—	166	5	26	1	4	1	196	7	203
Buttons - -	171	—	710	1,668	207	662	180	460	1,097	2,790	3,887
Candles - -	32	—	197	—	100	—	—	—	297	—	297
Candlesticks -	42	—	31	8	9	8	—	—	40	16	56

SUMMARY OF TRADES—*continued.*

Number of Firms.	Kinds of Trades.	Horse-Power employed.		Persons employed.								Total.
				Adults.		Young Persons.		Children.		Total of both Sexes.		
		Steam.	Water.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
3	Carpets	2	—	265	108	43	70	73	28	381	206	587
31	Carriages and wagons.	1,222	—	5,522	11	1,142	5	50	—	6,714	16	6,730
1	Cart-arms	2	—	5	—	—	—	—	—	5	—	5
1	Castors	—	—	—	—	3	—	—	—	3	—	3
4	Cement	164	25	355	11	30	5	—	—	385	16	401
29	Chains	658	43	1,229	72	316	61	147	13	1,692	146	1,838
15	Chandeliers	75	—	592	180	286	50	79	4	957	234	1,191
1	Charcoal	40	—	25	—	2	—	—	—	27	—	27
45	Chemicals	1,244	38	6,769	54	844	69	132	7	7,745	130	7,875
1	Cisterns	—	—	2	—	1	—	1	—	4	—	
1	Clocks	2	—	2	2	1	—	—	—	3	2	
1	Clog-irons	—	—	2	—	3	—	2	—	7	—	
28	Clothing	72	15	495	1,439	121	503	7	32	623	1,974	2,597
2	Cocoa	125	—	73	96	28	85	5	6	106	187	293
2	Coffin furniture	—	—	21	29	10	4	1	—	32	33	6
4	Collars	—	—	6	256	7	149	1	74	14	479	493
2	Colours	96	—	104	—	6	—	—	—	110	—	11
1	Confectioner	4	—	12	1	6	—	—	—	18	1	
2	Coopers	53	—	88	—	12	—	—	—	100	—	10
1	Copper caps	10	—	45	100	10	50	—	—	55	150	2
10	Do. mills	2,256	400	1,726	102	400	90	69	5	2,195	197	2,39
1	Do. smith	5	—	29	14	20	5	—	—	49	19	
1	Copying-presses	4	—	6	—	2	—	—	—	8	—	
6	Corkscrews	23	—	36	17	12	9	2	3	50	29	
2	Cornices	3	—	12	3	2	—	—	1	14	4	
1	Cotton winder	—	—	—	30	—	8	—	5	—	43	
	Cutler	3	—	16	—	3	—	—	—	19	—	
1	Decorator	12	—	170	—	55	—	—	—	225	—	
6	Die-sinkers	11	—	60	48	38	53	8	13	106	114	
1	Dog-collars	—	—	—	—	1	—	—	—	1	—	
1	Draper	—	—	19	39	10	6	—	—	29	45	
34	Electro platers	275	—	1,356	448	327	232	31	17	1,714	697	2,41
567	Engineers	9,783	285	39,040	95	7,376	62	605	37	47,021	194	47,21

SUMMARY OF TRADES—*continued.*

	Kinds of Trades.	Horse-Power employed.		Persons employed.								Total.
				Adults.		Young Persons.		Children.		Total of both Sexes.		
		Steam.	Water.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
17	Fenders and fire-irons.	104	—	252	49	59	7	8	1	319	57	376
1	Ferrules - -	12	—	15	—	—	—	—	—	15	—	15
4	Fishing-tackle -	7	—	68	24	23	30	10	10	101	64	165
6	Fitters - -	26	—	63	7	19	—	1	—	83	7	90
2	Flour mills -	430	—	237	6	69	—	—	—	306	6	312
10	Forks and spoons	154	15	242	182	112	44	36	4	390	230	620
63	Founders - -	4,498	165	14,584	961	4,853	499	928	66	20,365	1,526	21,891
1	Frames - -	4	—	3	4	1	4	1	4	5	12	17
2	Fuel - -	177	—	160	—	50	—	—	—	210	—	210
20	Furniture -	75	50	917	303	194	140	39	30	1,150	473	1,623
9	Galvanizers -	161	—	615	4	84	2	4	—	703	6	709
9	Gas - -	229	—	1,398	1	38	—	2	—	1,438	1	1,439
2	Do. nipples -	18	—	57	7	40	5	—	—	97	12	109
7	Gates & hurdles	40	—	243	1	120	—	7	—	370	1	371
1	Gelatine - -	46	—	55	4	23	12	14	—	92	16	108
4	German-silver -	136	—	257	—	26	1	12	—	295	1	296
37	Glass cutting -	457	—	171	26	136	10	16	—	323	36	359
92	Do. manufacturers.	2,205	—	6,669	1,046	1,862	383	406	7	8,937	1,436	10,373
18	Gloves - -	3	—	966	877	264	186	94	47	1,324	1,110	2,434
2	Gold-thread -	12	—	16	27	1	59	1	18	18	104	122
12	Grates - -	92	1	298	14	62	2	45	—	405	16	421
1	Gridirons - -	2	—	1	—	—	—	—	—	1	—	1
70	Grinders and polishers.	386	—	205	62	87	12	13	—	305	74	379
3	Grist grinders -	—	6	127	—	26	1	—	—	153	1	154
46	Guns and pistols	703	107	2,410	66	366	12	52	8	2,828	86	2,914
19	Do. locks - -	94	—	236	34	91	14	26	—	353	48	401
1	Handcuffs -	4	—	7	—	2	—	—	—	9	—	9
15	Harness - -	21	—	552	152	139	35	25	2	716	189	905
36	Hats and caps -	481	12	1,853	894	367	481	95	128	2,315	1,503	3,818
7	Hinges - -	59	—	125	51	38	6	13	3	176	60	236
10	Hollow-ware -	63	—	275	69	127	26	48	7	450	102	552
5	Hooks and eyes	33	—	56	58	38	70	12	14	106	142	248
7	Horsehair - -	13	—	50	248	23	100	48	119	121	467	588

SUMMARY OF TRADES—*continued.*

Number of Firms.	Kinds of Trades.	Horse-Power employed.		Persons employed.								Total.
				Adults.		Young Persons.		Children.		Total of both Sexes.		
		Steam.	Water.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
5	Horse-shoes and tips.	115	—	135	69	34	57	9	6	178	132	310
3	Hosiers - -	—	—	75	50	26	27	10	1	111	78	189
12	India-rubber -	306	45	313	227	85	96	13	17	411	340	751
240	Iron manufacturers.	36,239	2,486	44,458	2,293	9,459	1,857	2,678	242	56,595	4,392	60,987
1	Do. kegs -	—	—	2	—	3	—	2	—	7	—	7
3	Do. platers -	8	—	23	1	5	—	—	—	28	1	29
6	Do. washer -	51	—	34	62	2	32	6	5	42	99	141
31	Japanners, &c. -	174	—	1,221	768	325	332	53	35	1,599	1,135	2,734
5	Jet ornaments -	31	—	79	110	45	83	2	6	126	199	325
27	Jewellers - -	37	—	690	303	325	106	50	15	1,065	424	1,489
1	Jews' harps -	—	—	3	—	7	—	—	—	10	—	10
1	Lapidary - -	—	—	20	—	30	—	—	—	50	—	50
4	Lead - -	187	110	456	117	47	19	11	3	514	139	653
16	Leather - -	232	8	1,041	21	115	11	21	5	1,177	37	1,214
19	Locks and keys	50	—	571	58	168	37	53	1	792	96	888
3	Manure - -	115	—	216	45	13	7	—	—	229	52	281
5	Metal mounting	24	—	55	23	12	15	—	6	67	44	111
3	Do. refining -	18	—	49	11	1	2	—	—	50	13	63
7	Do. rolling -	107	4	150	20	94	—	4	—	248	20	268
6	Do. spinning -	113	—	23	—	6	—	—	—	29	—	29
1	Milliner - -	—	—	—	43	—	14	—	—	—	57	57
35	Nails - -	784	—	1,386	560	583	282	223	39	2,192	881	3,073
58	Needles - -	237	88	967	551	262	242	155	84	1,384	877	2,261
2	Oil - -	80	—	84	41	7	5	—	—	91	46	137
1	Oiled baize -	4	—	60	—	7	—	—	—	67	—	67
1	Ornamental metal work	—	—	31	3	14	—	1	—	46	3	49
157	Paper - -	6,207	2,610	3,620	2,947	882	694	361	127	4,863	3,768	8,631
2	Do. bags -	—	—	4	26	2	36	—	—	6	62	68
1	Penholders -	12	—	11	23	5	15	—	2	16	40	56
11	Pens - -	239	—	218	1,236	59	450	36	38	313	1,724	2,037
2	Pewterers - -	4	—	29	1	9	—	—	—	38	1	39
25	Pins - -	178	28	313	225	103	171	28	56	444	452	896
	Plumber - -	4	—	15	—	8	—	—	—	23	—	23

SUMMARY OF TRADES—*continued.*

Number of Firm	Kinds of Trades.	Horse-Power employed.		Persons employed.								Total.
				Adults.		Young Persons.		Children.		Total of both Sexes.		
		Steam.	Water	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
5	Potters - -	166	—	330	1	85	—	14	—	429	1	430
840	Printers - -	1,090	5	4,055	247	2,171	228	312	36	6,538	511	7,049
301	Do. and binders.	201	12	1,706	357	819	356	116	40	2,641	753	3,394
1	Pumps - -	—	—	29	3	12	2	3	1	44	6	50
1	Purses - -	—	—	39	11	29	—	2	—	70	11	81
30	Quarries -	699	631	4,146	1	620	—	218	—	4,984	1	4,985
4	Rails - -	452	—	529	—	91	8	6	—	626	8	634
1	Railway chairs -	7	—	16	9	—	—	—	—	16	9	25
1	Rifle sights -	4	—	40	—	13	—	—	—	53	—	53
1	Rings - -	3	—	3	4	6	—	—	—	9	4	13
4	Roller manufacturers.	32	52	173	—	55	—	17	—	245	—	245
10	Rope - -	144	—	1,335	121	159	57	138	18	1,632	196	1,828
1	Rugs - -	4	—	1	—	2	1	—	—	3	1	4
1	Rulers - -	3	—	19	11	3	7	2	1	24	19	43
4	Safes - -	100	—	423	—	17	—	5	—	445	—	445
1	Safety fuses -	10	—	6	54	—	25	—	5	6	84	90
27	Salt - -	620	5	2,158	56	316	26	43	1	2,517	83	2,600
2	Sash Pullies -	2	—	6	3	4	2	1	—	11	5	16
10	Saw-mills - -	251	—	369	9	60	9	13	1	442	19	461
2	Scientific apparatus.	6	—	8	1	4	1	—	—	12	2	14
1	Screw propeller manufacturer.	3	—	11	—	—	—	—	—	11	—	11
5	Scythes - -	38	60	57	3	12	2	4	—	73	5	78
1	Seed crusher -	100	—	85	—	—	—	—	—	85	—	85
27	Ships and boats	640	—	3,527	399	428	—	8	—	3,963	399	4,362
1	Ships' logs -	4	—	24	1	3	—	—	—	27	1	28
2	Ship sheathing -	380	—	295	13	57	—	2	—	354	13	367
1	Shot - -	40	—	18	—	5	—	1	—	24	—	24
4	Silk - -	—	—	54	165	16	49	27	103	97	317	414
1	Slate-dresser -	95	—	52	—	2	—	—	—	54	—	54
133	Smelters - -	12,740	211	15,208	523	2,079	151	578	24	17,865	698	18,563
39	Smiths - -	287	—	854	12	214	—	22	—	1,090	12	1,102
2	Soda water -	12	—	78	—	26	—	4	—	108	—	108
27	Spades - -	428	177	633	24	248	11	37	—	918	35	953

SUMMARY OF TRADES—*continued.*

Number of Firms.	Kinds of Trades.	Horse-Power employed.		Persons employed.								Total.
				Adults.		Young Persons.		Children.		Total of both Sexes.		
		Steam.	Water.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
1	Spectacle frames	1	—	3	—	—	—	—	—	3	—	3
1	Spindles	1	—	1	2	3	4	3	—	7	6	13
2	Spirits	128	—	125	—	10	—	—	—	135	—	135
10	Springs	119	—	351	55	92	13	21	4	464	72	536
1	Stair-rods	4	—	7	2	1	—	—	—	8	2	10
12	Stampers and piercers.	62	—	104	44	39	43	21	2	164	89	253
1	Starch	23	—	21	21	5	37	3	10	29	68	97
1	Stoppers	14	—	6	17	—	5	—	3	6	25	31
32	Straw bonnets, &c.	12	—	222	2,001	37	367	10	3	269	2,371	2,640
11	Sugar refiners	1,613	—	1,193	—	70	—	11	—	1,274	—	1,274
9	Swords	68	—	105	7	16	—	—	—	121	7	128
1	Table covers	9	—	22	12	6	—	—	—	28	12	40
4	Thimbles	12	—	33	61	14	30	10	8	57	99	156
69	Tobacco	269	34	602	684	324	531	223	91	1,149	1,306	2,455
57	Tools	970	285	1,921	71	406	11	95	9	2,422	91	2,513
15	Toys	69	—	315	82	66	78	22	7	403	167	570
1	Traps	6	—	8	—	3	—	4	—	15	—	15
5	Trays	24	—	79	17	21	14	5	1	105	32	137
52	Tubes	1,524	25	2,957	126	1,104	54	293	11	4,354	191	4,545
10	Turners	82	—	276	29	74	21	13	1	363	51	414
1	Turn-tables	12	—	6	—	—	—	—	—	6	—	6
6	Umbrellas, &c.	22	28	248	194	89	82	77	101	414	377	791
1	Varnish	12	—	33	16	1	1	—	—	34	17	51
4	Watches	10	—	272	1	71	3	—	—	343	4	347
4	Wheels	130	—	408	—	78	—	17	—	503	—	503
52	Wire	2,207	186	2,243	116	566	55	134	3	2,943	174	3,117
1	Woollen	—	—	30	40	6	16	—	—	36	56	92
4	Zinc rolling	2	10	102	—	26	—	—	—	128	—	128
5,084	Total	103,573	8,577	211,625	31,158	48,846	13,683	11,170	2,775	271,641	47,616	319,257

To face page 96.

Table No. 4.

Showing the Trades in which 100 Persons and upwards are employed in different Counties side by side, omitting the Counties in which fewer than 100 are employed in the same Trades, so that the Track, and the commercial Value of the Trade itself, may be traced through the whole Division.

Trades.	Anglesea.	Beds.	Berks.	Bucks.	Carmarthen.	Carnarvon.	Chester.	Cornwall.	Cumberland.	Denbigh.	Devon.	Dorset.	Flint.	Glamorgan.	Gloucester.	Hants.	Herts.	Lancaster.	Leicester.	Merioneth.	Monmouth.	Montgomery.	Northampton.	Oxford.	Pembroke.	Salop.	Somerset.	Stafford.	Warwick.	Westmoreland.	Wilts.	Worcester.	Trades.
Ammunition	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	297	351	..	..	Ammunition.
Anchors	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	127	..	..	..	..	Anchors.
Anvils and vices	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	409	Anvils and vices.
Awl-blades	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	115	..	..	..	..	Awl-blades.
Axles	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	276	165	..	..	..	Axles.
Bedsteads	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1,759	..	..	..	Bedsteads.
Bell-founders	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	171	..	..	..	Bell-founders.
Bobbins	..	..	..	..	..	..	..	..	106	..	..	..	..	..	..	..	..	246	136	..	..	..	..	..	..	..	..	..	..	389	..	..	Bobbins.
Boilers	..	..	..	..	..	..	698	..	..	..	..	..	..	..	..	..	..	622	..	..	..	..	..	..	..	..	..	361	..	..	..	203	Boilers.
Bolts, rivets, &c.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	579	..	..	470	..	..	..	..	..	..	3,189	1,429	..	..	..	Bolts, rivets, &c.
Bookbinders	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	251	..	..	..	..	..	..	..	..	..	..	170	..	..	..	Bookbinders.
Book-clasps	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	219	..	..	..	Book-clasps.
Boots and shoes	..	..	..	..	..	..	618	..	..	..	..	..	..	..	1,355	..	..	..	2,720	..	..	..	2,503	..	..	..	..	317	1,736	253	246	..	262	Boots and shoes.
Brass taps	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	235	..	..	..	Brass taps.
Braziers	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	210	156	..	..	..	Braziers.
Brewers	..	..	..	..	..	..	..	..	..	..	..	..	..	112	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Brewers.
Bricks and tiles	..	510	..	..	..	..	..	..	..	..	..	..	..	135	..	..	..	..	150	..	..	..	..	..	..	..	..	227	1,474	252	..	..	359	Bricks and tiles.
Bridge builders	..	..	..	..	..	..	300	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Bridge builders.
Britannia metal	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	128	..	..	..	..	Britannia metal.
Buckles	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	301	..	..	..	..	..	Buckles.
Builders	162	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	156	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Builders.
Button makers	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3,847	..	..	..	..	..	Button makers.
Candles	..	..	..	..	..	..	297	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Candles.
Carpets	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	162	205	220	..	Carpets.
Carriage makers	..	..	219	843	..	..	297	..	..	..	..	..	..	388	933	..	..	1,379	..	..	..	..	..	..	..	..	147	232	1,580	..	..	542	Carriage makers.
Cement makers	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	136	..	..	..	..	..	..	..	..	..	..	..	..	265	..	.	..	Cement makers.
Chains	..	..	..	..	..	..	..	..	..	..	..	..	220	394	..	..	..	..	..	..	..	..	..	..	..	..	..	851	189	..	..	134	Chains.
Chandeliers	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1,105	..	..	..	Chandeliers.
Chemicals	..	..	..	..	..	..	805	..	..	..	..	..	1,077	640	570	..	..	3,425	..	..	..	..	..	..	..	..	..	403	..	..	..	802	Chemicals.
Clothing	..	..	392	..	..	..	162	..	..	..	..	..	..	..	1,060	..	..	380	..	..	..	..	107	..	..	..	120	..	144	..	..	..	Clothing.
Cocoa manufacturers	..	..	..	..	..	..	..	..	..	..	..	..	..	..	193	..	..	..	..	..	..	..	..	..	..	..	..	..	100	..	..	..	Cocoa manufacturers.
Collars	..	..	..	..	..	..	..	..	..	..	..	..	..	.	..	..	..	..	..	..	..	..	..	..	..	..	373	..	..	..	.	120	Collars.
Copper caps	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	205	..	..	..	Copper caps.
„ mills	..	..	..	..	..	..	..	..	..	..	..	..	121	1,773	.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	266	„ mills.
Decorators	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	225	..	..	..	Decorators.
Die-sinkers	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.	..	..	..	..	..	..	..	220	..	..	..	Die-sinkers.
Electro-platers	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	158	2,253	..	..	..	Electro-platers.
Engineers	..	567	650	113	422	..	7,563	1,014	1,033	..	1,028	216	219	1,401	1,655	946	165	13,609	484	..	806	..	1,373	495	..	805	1,427	4,817	1,685	..	2,279	2,218	Engineers.
Fenders and fire-irons	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	229	..	..	147	Fenders and fire-irons.
Fishing tackle	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	165	Fishing tackle.
Flour mills	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	312	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Flour mills.
Forks and spoons	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	620	..	..	..	Forks and spoons.
Founders	..	..	..	..	..	..	485	332	191	..	463	133	..	538	462	155	..	4,374	271	..	..	..	101	105	..	779	744	5,309	6,345	..	115	510	Founders.
Fuel	..	..	..	726	..	..	..	..	..	..	..	..	..	210	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Fuel.
Furniture	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	598	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Furniture.
Galvanizers	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	365	302	..	..	..	Galvanizers.
Gas makers	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	704	..	..	..	..	..	..	..	..	..	125	442	..	..	..	Gas makers.
Gas nipple makers	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	109	..	..	..	Gas nipple makers.
Gates and hurdles	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	175	..	..	..	171	Gates and hurdles.
Gelatine	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	108	..	..	..	Gelatine.
German silver	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	296	..	..	..	German silver.
Glass cutters	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	201	100	..	..	..	Glass cutters.
„ manufacturers	..	..	..	..	..	..	..	..	..	..	..	..	..	..	188	..	..	4,723	..	..	..	..	..	..	..	..	400	3,298	1,543	..	..	173	„ manufacturers.
Gloves	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1,529	..	..	..	..	800	Gloves.
Gold-thread	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	122	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Gold-thread.
Grate makers	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	225	..	..	138	Grate makers.
Grinders and polishers	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	367	..	..	..	Grinders and polishers.
Grist grinders	..	..	..	..	..	..	..	..	..	..	154	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Grist grinders.
Gun-locks	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	321	..	..	..	..	Gun-locks.
Guns and pistols	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	105	..	..	..	..	..	..	..	..	..	103	2,619	..	..	..	Guns and pistols.
Harness makers	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	336	569	..	..	..	Harness makers.
Hats and caps	..	..	..	..	..	..	1,639	..	..	..	..	..	..	..	..	..	..	1,381	201	..	..	..	..	..	..	..	..	..	421	..	..	..	Hats and caps.
Hinges	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	101	135	..	..	..	Hinges.
Hollow-ware	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	195	..	..	265	Hollow-ware.
Hooks and eyes	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	248	..	..	..	Hooks and eyes.
Horsehair	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	172	342	..	..	..	..	Horsehair.
Horse-shoes and tips	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	189	..	..	..	..	..	..	..	..	287	..	..	..	..	Horse-shoes and tips.
Hosiers	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	411	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Hosiers.
India-rubber	..	..	..	..	9,033	..	222	..	705	374	..	..	..	10,945	858	..	..	4,669	..	..	5,452	..	138	..	..	515	..	25,828	411	..	172	1,711	India-rubber.
Iron manufacturers	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	139	..	..	..	..	Iron manufacturers.
„ washer do.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1,668	1,066	..	..	..	„ washer do.
Japanners	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	325	..	..	..	Japanners.
Jet ornaments	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1,489	..	..	..	Jet ornaments.
Jewellery	..	..	..	..	..	..	386	..	..	..	..	..	..	..	..	..	..	..	..	..	..	240	..	..	..	..	..	..	..	..	..	..	Jewellery.
Lead	..	..	..	..	..	..	107	..	..	..	..	..	..	..	197	..	..	310	..	..	..	..	..	..	..	..	..	246	..	..	..	..	Lead.
Leather	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	729	..	..	..	..	Leather.
Locks and keys	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	126	..	..	..	..	Locks and keys.
Manure	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	103	..	..	..	..	Manure.
Metal mounters	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	262	..	..	..	Metal mounters.
„ rollers	..	..	..	..	..	..	..	..	..	..	..	..	..	..	115	..	..	..	..	..	767	..	..	..	..	..	..	438	1,382	..	..	299	„ rollers.
Nail makers	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	357	..	..	1,904	Nail makers.
Needle makers	..	..	338	1,005	..	..	153	..	106	126	1,080	..	186	..	658	302	625	2,153	..	..	..	..	..	242	..	..	298	..	486	..	..	230	Needle makers.
Paper makers	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2,037	..	..	..	Paper makers.
Pen makers	..	..	..	..	..	..	..	..	..	..	..	..	..	..	152	..	..	..	..	..	..	..	..	..	..	..	..	..	744	..	..	..	Pen makers.
Pin makers	..	..	..	..	..	..	..	..	..	..	..	278	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Pin makers.
Pottery	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Pottery.
Printers	..	..	135	..	..	..	242	106	211	..	380	..	..	147	280	323	..	1,568	106	..	..	..	..	267	..	..	205	415	1,247	..	127	173	Printers.
„ and binders	..	..	..	..	..	..	..	..	..	..	154	..	..	104	374	..	101	1,013	137	..	..	..	..	..	..	..	293	..	400	..	..	..	„ and binders.
Quarries	..	..	..	..	..	1,378	333	..	..	407	..	..	..	..	..	..	..	..	..	2,479	..	..	..	..	..	..	..	..	175	..	..	..	Quarries.
Rail makers	..	..	..	..	..	..	266	..	..	..	..	..	..	..	..	..	..	..	..	..	100	..	..	..	..	..	..	210	..	..	..	..	Rail makers.
Roller makers	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	245	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Roller makers.
Rope	..	..	..	..	..	..	224	..	..	..	..	..	..	..	..	..	..	1,437	..	..	..	..	..	..	..	..	..	..	167	..	..	..	Rope.
Safe makers	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	412	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Safe makers.
Salt makers	..	..	..	..	..	..	2,121	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	436	Salt makers.
Saw-mills	..	..	..	..	..	..	..	..	..	..	..	..	..	..	166	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Saw-mills.
Ship builders	..	..	..	..	..	..	808	100	302	..	100	..	..	172	253	..	..	2,178	..	..	..	..	..	240	..	..	..	..	..	..	..	..	Ship builders.
Ship sheathers	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	367	..	..	..	..	Ship sheathers.
Silk manufacturers	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	143	..	..	..	..	..	..	..	..	..	..	224	..	..	..	Silk manufacturers.
Smelters	..	..	..	..	1,492	..	149	237	670	187	..	..	624	1,662	313	..	..	2,592	..	..	2,802	375	..	..	..	2,014	186	3,708	..	..	..	1,235	Smelters.
Smiths	..	..	140	..	..	..	..	..	..	..	..	..	..	..	..	..	..	448	..	..	193	..	..	..	..	..	..	182	..	..	..	..	Smiths.
Spade makers	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	116	..	..	..	.	.	..	..	..	..	102	..	..	..	537	Spade makers.
Spring makers	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	368	168	..	..	..	Spring makers.
Stampers and piercers	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	191	..	..	..	Stampers and piercers.
Straw bonnets	..	2,111	..	..	..	..	..	..	..	..	..	..	..	..	..	529	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Straw bonnets.
Sugar refiners	..	..	..	..	..	..	..	..	..	..	..	..	..	..	609	..	..	586	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Sugar refiners.
Thimbles	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Thimbles.

Galvanizers
makers
le makers
rdles

Table No. 5.

Works under the Factory Acts Extension Act, 1867, in the Western Division of England and Wales, *October* 1868.

ANGLESEA.

Number of Firms.	Kinds of Trades.	Horse-Power employed.		Persons employed.								Total.
				Adults.		Young Persons.		Children.		Total of both Sexes.		
		Steam.	Water.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
1	Breakwater builder.	—	—	150	—	12	—	—	—	162	—	162
1	Chemicals	12	—	52	—	5	—	—	—	57	—	57
1	Engineer	5	—	8	—	2	—	—	—	10	—	10
3	Founders	13	—	16	—	8	—	—	—	24	—	24
1	Ships and boats	30	—	55	—	14	—	—	—	69	—	69
1	Smelter	15	6	25	—	3	—	—	—	28	—	28
2	Tobacco manufacturers.	6	—	5	—	7	—	1	—	13	—	13
10	Total	81	6	311	—	51	—	1	—	363	—	363

BEDFORD.

1	Bookbinder	—	—	—	1	3	2	—	—	3	3	6
3	Bricks and tiles	270	—	422	—	74	—	14	—	510	—	510
7	Engineers	94	—	476	—	91	—	—	—	567	—	567
1	Founder	2	—	14	—	1	—	—	—	15	—	15
12	Printers	—	—	32	—	26	—	3	—	61	—	61
2	Do. and binders	—	—	6	—	—	—	—	—	6	—	6
24	Straw bonnets	12	—	166	1,626	17	302	—	—	183	1,928	2,111
50	Total	378	—	1,116	1,627	212	304	17	—	1,345	1,931	3,276

BERKS.

3	Binders	—	—	8	5	2	—	—	—	10	5	15
1	Brewer	10	—	65	—	2	—	—	—	67	—	67
1	Bricks and tiles	—	—	29	3	7	—	12	—	48	3	51
1	Carriages and wagons.	20	—	200	—	19	—	—	—	219	—	219
2	Clothiers	16	—	69	219	21	78	—	5	90	302	392
10	Engineers	116	—	558	—	84	—	8	—	650	—	650
3	Founders	4	2	35	—	10	—	—	—	45	—	45

BERKS—*continued.*

Number of Firms.	Kinds of Trades.	Horse-Power employed.		Persons employed.								Total.
				Adults.		Young Persons.		Children.		Total of both Sexes.		
		Steam.	Water.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
7	Paper - -	209	260	165	118	28	23	3	1	196	142	338
21	Printers - -	3	—	92	—	42	—	1	—	135	—	135
3	Do. and binders	—	—	7	—	4	1	—	—	11	1	12
4	Smiths - -	111	—	105	—	29	—	6	—	140	—	140
1	Tobacco - -	5	—	7	—	4	—	—	—	11	—	11
57	Total - -	494	262	1,340	345	252	102	30	6	1,622	453	2,075

BRECON.

1	Ammunition -	—	75	47	1	8	—	4	—	59	1	60
2	Bookbinders -	—	—	2	1	—	—	—	—	2	1	3
1	Bricks and tiles	20	—	27	9	7	9	5	—	39	18	57
1	Paper - -	—	45	10	4	2	—	—	—	12	4	16
3	Printers - -	—	1	12	—	4	—	—	—	16	—	16
1	Smelter - -	88	—	45	—	11	—	—	—	56	—	56
9	Total - -	108	121	143	15	32	9	9	—	184	24	208

BUCKS.

1	Bookbinders -	—	—	1	—	—	—	—	—	1	—	1
1	Boots and shoes	—	—	27	6	18	4	1	—	46	10	56
1	Brushes - -	4	—	18	13	12	10	6	1	36	24	60
1	Carriages and wagons.	60	—	756	6	79	1	1	—	836	7	843
1	Clothier - -	—	—	2	20	—	30	—	—	2	50	52
6	Engineers -	31	—	86	—	27	—	—	—	113	—	113
3	Founders -	18	—	45	—	6	—	—	—	51	—	51
8	Furniture -	14	—	378	89	92	100	37	30	507	219	726
19	Paper - -	484	386	477	306	110	70	39	3	626	379	1,005
12	Printers - -	3	—	34	7	20	6	—	—	54	13	67
1	Do. and binders	—	—	2	1	1	—	—	—	3	1	4
1	Smith - -	2	—	1	—	2	—	—	—	3	—	3
53	Total - -	616	386	1,826	448	367	221	85	34	2,278	703	2,981

CARDIGAN.

Number of Firms.	Kinds of Trades.	Horse-Power employed.		Persons employed.								Total.
				Adults.		Young Persons.		Children.		Total of both Sexes.		
		Steam.	Water.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
1	Engineer - -	12	—	18	—	1	—	—	—	19	—	19
1	Founder - -	6	—	17	—	5	—	—	—	22	—	22
6	Printers - -	—	—	13	—	4	—	—	—	17	—	17
1	Do. and binder -	—	—	2	—	1	—	—	—	3	—	3
9	Total - -	18	—	50	—	11	—	—	—	61	—	61

CARMARTHEN.

1	Bookbinder -	—	—	1	—	1	—	—	—	2	—	2
2	Bricks and tiles	24	—	21	17	12	11	7	1	40	29	69
1	Chemicals -	4	4	63	10	—	—	3	—	66	10	76
4	Engineers -	66	—	361	—	52	—	9	—	422	—	422
2	Founders -	15	—	49	—	20	—	—	—	69	—	69
9	Iron manufacturers.	1,315	1,210	3,623	635	1,463	652	565	95	7,651	1,382	9,033
11	Printers - -	—	—	54	1	23	1	3	—	80	2	82
3	Do. and binders	4	—	20	1	6	—	—	—	26	1	27
1	Saw-mill - -	25	—	34	—	4	—	3	—	41	—	41
1	Ships - -	12	—	72	—	22	—	3	—	97	—	97
5	Smelters - -	860	—	1,232	7	184	6	63	—	1,479	13	1,492
40	Total - -	2,325	1,214	7,530	671	1,787	670	656	96	9,973	1,437	11,410

CARNARVON.

5	Printers - -	8	—	56	—	23	—	—	—	79	—	79
2	Do. and binders	4	—	16	3	2	1	1	—	19	4	23
12	Quarries - -	381	188	1,116	—	192	—	70	—	1,378	—	1,378
19	Total - -	393	188	1,188	3	217	1	71	—	1,476	4	1,480

CHESTER.

4	Boilers - -	45	—	421	—	125	—	152	—	698	—	698
1	Bolts, rivets, &c.	20	—	33	4	13	1	1	—	47	5	52
1	Bookbinders -	—	—	8	4	8	5	—	—	16	9	25

CHESTER—*continued.*

Number of Firms.	Kinds of Trades.	Horse-Power employed.		Persons employed.								Total.
				Adults.		Young Persons.		Children.		Total of both Sexes.		
		Steam.	Water.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
7	Boots and shoes	5	—	273	136	127	75	4	3	404	214	618
1	Brewer - -	16	—	55	—	1	—	—	—	56	—	56
1	Bridge builder -	20	—	250	—	20	—	30	—	300	—	300
1	Candles - -	32	—	197	—	100	—	—	—	297	—	297
2	Carriages and wagons.	36	—	279	—	18	—	—	—	297	—	297
3	Chemicals -	121	—	600	—	157	—	48	—	805	—	805
2	Clothiers -	—	—	30	77	5	50	—	—	35	127	162
1	Colours - -	71	—	53	—	2	—	—	—	55	—	55
1	Confectioner -	4	—	12	1	6	—	—	—	18	1	19
2	Copper mills -	80	—	40	—	—	—	—	—	40	—	40
54	Engineers -	1,178	8	6,649	56	789	12	45	12	7,483	80	7,563
24	Founders -	130	1	384	2	87	—	12	—	483	2	485
1	Furniture -	3	—	54	11	9	1	—	—	63	12	75
1	Gas - -	—	—	67	—	2	—	1	—	70	—	70
1	Guns and pistols	1	—	2	—	—	—	—	—	2	—	2
10	Hats and caps -	286	12	766	331	185	183	58	116	1,009	630	1,639
3	Iron manufacturers.	210	16	174	—	25	—	23	—	222	—	222
1	Lead - -	91	—	271	95	16	4	—	—	287	99	386
1	Leather - -	20	—	85	8	14	—	—	—	99	8	107
1	Manure - -	35	—	85	—	5	—	—	—	90	—	90
1	Milliner - -	—	—	—	43	—	14	—	—	—	57	57
3	Paper - -	161	116	89	39	16	3	4	2	109	44	153
43	Printers - -	16	—	137	4	91	1	9	—	237	5	242
9	Do. and binders	2	—	33	1	15	—	3	1	51	2	53
1	Quarries - -	—	—	265	—	44	—	24	—	333	—	333
1	Rails - -	270	—	218	—	42	—	6	—	266	—	266
2	Rope - -	20	—	50	24	52	—	80	18	182	42	224
24	Salt - -	516	5	1,809	56	200	26	29	1	2,038	83	2,121
5	Ships and boats	101	—	652	—	156	—	—	—	808	—	808
3	Smelters - -	117	—	119	—	22	—	8	—	149	—	149
2	Smiths - -	4	—	17	—	9	—	—	—	26	—	26
2	Spades - -	40	13	22	—	4	—	—	—	26	—	26
1	Tobacco - -	68	24	66	17	55	—	39	—	160	17	177

CHESTER—*continued.*

Number of Firms.	Kinds of Trades.	Horse-Power employed.		Persons employed.								Total.
				Adults.		Young Persons.		Children.		Total of both Sexes.		
		Steam.	Water.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
3	Tools - -	22	—	50	6	13	3	24	9	87	18	105
2	Wire - -	18	—	52	21	21	11	2	—	75	32	107
1	Zinc rolling -	—	—	12	—	3	—	—	—	15	—	15
237	Total - -	3,774	195	14,389	936	2,447	389	602	162	17,438	1,487	18,925

CORNWALL.

2	Bookbinders -	—	—	5	2	1	—	—	—	6	2	8
13	Engineers -	380	68	793	—	209	—	12	—	1,014	—	1,014
24	Founders -	132	76	242	—	89	—	1	—	332	—	332
1	Grates - -	—	1	1	—	—	—	—	—	1	—	1
1	Leather - -	—	—	17	6	3	11	—	5	20	22	42
3	Paper - -	48	73	44	15	11	—	—	—	55	15	70
31	Printers - -	—	—	57	—	48	1	—	—	105	1	106
26	Do. and binders	4	—	47	2	43	—	1	—	91	2	93
1	Quarries - -	—	—	40	—	50	—	—	—	90	—	90
1	Safety fuses -	10	—	6	54	—	25	—	5	6	84	90
1	Ships and boats	—	—	80	—	20	—	—	—	100	—	100
13	Smelters - -	46	2	223	5	8	1	—	—	231	6	237
1	Smith - -	2	—	2	—	2	—	—	—	4	—	4
3	Spades - -	—	23	21	—	18	—	3	—	42	—	42
120	Total - -	602	243	1,574	82	501	38	17	10	2,092	130	2,222

CUMBERLAND.

1	Bobbins - -	28	—	70	—	32	—	4	—	106	—	106
1	Bolts, rivets, &c.	7	—	7	1	5	—	2	—	14	1	15
1	Bookbinders -	—	—	4	—	2	—	—	—	6	—	6
12	Engineers -	210	—	832	—	189	—	12	—	1,033	—	1,033
10	Founders - -	97	8	140	6	45	—	—	—	185	6	191
1	Hats and caps -	16	—	46	19	17	16	—	—	63	35	98
7	Iron manufacturers.	576	36	556	14	94	11	27	3	677	28	705
1	Leather - -	12	—	55	—	8	—	—	—	63	—	63

CUMBERLAND—*continued.*

Number of Firms.	Kinds of Trades.	Horse-Power employed.		Persons employed.								Total.
				Adults.		Young Persons.		Children.		Total of both Sexes.		
		Steam.	Water.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
3	Paper - -	174	20	20	43	26	9	6	2	52	54	106
10	Printers - -	20	—	116	5	54	29	1	6	171	40	211
5	Do. and binders	2	—	33	5	25	4	—	—	58	9	67
1	Quarries - -	30	—	50	—	12	—	—	—	62	—	62
4	Ships and boats	95	—	210	—	92	—	—	—	302	—	302
4	Smelters - -	1,125	—	627	3	36	—	4	—	667	3	670
2	Spades - -	30	47	43	2	6	—	—	—	49	2	51
3	Tobacco - -	8	—	21	10	4	36	3	15	28	61	89
66	Total - -	2,430	111	2,830	108	647	105	59	26	3,536	239	3,775

DENBIGH.

1	Bricks and tiles	36	—	53	—	31	—	2	—	86	—	86
5	Engineers -	39	15	56	—	9	—	—	—	65	—	65
3	Founders -	17	—	16	—	6	—	—	—	22	—	22
4	Iron manufacturers.	1,029	20	186	3	132	—	53	—	371	3	374
1	Leather - -	30	—	59	—	9	—	1	—	69	—	69
2	Paper - -	45	40	53	45	5	7	16	—	74	52	126
1	Pottery - -	14	—	48	—	16	—	4	—	68	—	68
7	Printers - -	2	—	21	—	9	—	—	—	30	—	30
3	Do. and binders	13	—	42	5	36	13	1	—	79	18	97
2	Quarries - -	14	58	365	—	28	—	14	—	407	—	407
3	Smelters	144	—	173	3	8	—	3	—	184	3	187
1	Soda water -	8	—	34	—	12	—	4	—	50	—	50
33	Total - -	1,391	133	1,106	56	301	20	98	—	1,505	76	1,581

DERBY (part of).

2	Glass - -	7	—	31	3	10	1	3	—	44	4	48

DEVON.

1	Axles - -	2	—	3	—	3	—	—	—	6	—	6
14	Bookbinders -	—	—	34	14	16	10	—	—	50	24	74
1	Chemicals -	—	—	20	—	—	—	—	—	20	—	20

DEVON—*continued.*

Number of Firms.	Kinds of Trades.	Horse-Power employed.		Persons employed.								Total.
				Adults.		Young Persons.		Children.		Total of both Sexes.		
		Steam.	Water.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
18	Engineers -	246	10	835	—	186	—	7	—	1,028	—	1,028
30	Founders -	84	20	391	—	71	—	1	—	463	—	463
1	Furniture -	—	50	75	—	19	—	2	—	96	—	96
1	Gloves - -	—	—	6	23	6	16	1	3	13	42	55
1	Grates - -	2	—	3	—	2	—	—	—	5	—	5
3	Grist grinders -	—	6	127	—	26	1	—	—	153	1	154
1	Lead - -	25	—	5	—	—	—	—	—	5	—	5
19	Paper - -	720	343	445	450	93	62	24	6	562	518	1,080
95	Printers -	521	—	350	10	193	9	18	—	561	19	580
41	Do. and binders	1	—	95	7	51	1	—	—	146	8	154
2	Ships and boats	—	—	60	—	40	—	—	—	100	—	100
1	Smith - -	2	—	4	—	—	—	—	—	4	—	4
1	Starch - -	23	—	21	21	5	37	3	10	29	68	97
1	Sugar refiner -	70	—	65	—	3	—	11	—	79	—	79
4	Tobacco - -	14	—	31	—	24	—	11	—	66	—	66
5	Tools - -	—	38	25	—	3	—	—	—	28	—	28
240	Total - -	1,720	467	2,595	525	741	136	78	19	3,414	680	4,094

DORSET.

1	Bricks and tiles	30	—	43	—	17	—	5	—	65	—	65
1	Carriages and wagons.	4	—	7	—	9	—	1	—	17	—	17
14	Engineers -	58	11	169	—	45	—	2	—	216	—	216
7	Founders - -	18	—	99	—	34	—	—	—	133	—	133
1	Paper - -	16	16	20	20	3	—	3	—	26	20	46
3	Pottery - -	127	—	227	1	43	—	7	—	277	1	278
8	Printers - -	5	—	51	—	31	—	3	—	85	—	85
8	Do. and binders	—	—	19	3	15	2	—	—	34	5	39
1	Silk - -	—	—	8	18	2	6	5	8	15	32	47
44	Total - -	268	27	643	42	199	8	26	8	868	58	926

FLINT.

Number of Firms.	Kinds of Trades.	Horse-Power employed.		Persons employed.								Total.
				Adults.		Young Persons.		Children.		Total of both Sexes.		
		Steam.	Water.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
1	Chains	160	—	170	—	50	—	—	—	220	—	220
3	Chemicals	186	14	967	—	100	—	10	—	1,077	—	1,077
1	Copper mills	30	180	100	1	14	—	6	—	120	1	121
4	Engineers	115	—	163	—	54	—	2	—	219	—	219
3	Founders	20	—	9	—	3	—	1	—	13	—	13
2	Iron manufacturers.	—	40	12	—	3	—	—	—	15	—	15
1	Manure	20	—	60	—	5	—	—	—	65	—	65
1	Oil	74	—	70	—	5	—	—	—	75	—	75
4	Paper	105	78	77	62	11	18	7	11	95	91	186
6	Printers	5	—	26	6	13	2	—	8	39	16	55
2	Do. and binders	—	—	4	—	3	—	—	—	7	—	7
6	Smelters	214	—	560	7	53	—	4	—	617	7	624
1	Wire	16	—	21	—	8	—	3	—	32	—	32
35	Total	945	312	2,239	76	322	20	33	19	2,594	115	2,709

GLAMORGAN.

1	Anchors	40	—	16	—	6	—	—	—	22	—	22
1	Boilers	10	—	23	—	8	—	3	—	34	—	34
1	Bolts, rivets, &c.	12	—	14	—	3	—	—	—	17	—	17
1	Bookbinders	—	—	1	—	1	—	—	—	2	—	2
1	Brewer	24	—	103	—	8	—	1	—	112	—	112
1	Bricks and tiles	37	—	80	10	23	12	8	2	111	24	135
4	Carriages and wagons.	126	—	346	—	42	—	—	—	388	—	388
4	Chains	188	43	295	—	66	—	33	—	394	—	394
5	Chemicals	134	—	595	4	32	—	9	—	636	4	640
2	Copper mills	1,365	220	1,256	99	271	90	52	5	1,579	194	1,773
23	Engineers	328	35	1,174	—	199	—	28	—	1,401	—	1,401
17	Founders	380	8	455	1	78	—	4	—	537	1	538
2	Fuel manufacturers.	177	—	160	—	50	—	—	—	210	—	210
24	Iron do.	7,632	129	7,104	753	1,644	746	600	98	9,348	1,597	10,945
1	Paper	75	—	30	23	8	4	1	—	39	27	66
23	Printers	12	—	93	—	52	—	2	—	147	—	147

GLAMORGAN—*continued.*

Number of Firms.	Kinds of Trades.	Horse-Power employed.		Persons employed.								Total.
				Adults.		Young Persons.		Children.		Total of both Sexes.		
		Steam.	Water.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
14	Do. and binders	—	—	49	2	43	3	7	—	99	5	104
1	Quarries	—	30	55	—	6	—	—	—	61	—	61
2	Ships and boats	32	—	164	—	8	—	—	—	172	—	172
14	Smelters	528	53	1,400	4	205	1	52	—	1,657	5	1,662
1	Smith	7	—	2	—	1	—	—	—	3	—	3
1	Tobacco	2	—	1	1	1	1	—	—	2	2	4
1	Wheels	8	—	2	—	1	—	—	—	3	—	3
1	Wire	40	—	23	—	16	—	—	—	39	—	39
1	Zinc rolling	—	8	60	—	4	—	—	—	64	—	64
147	Total	12,328	526	13,501	897	2,776	857	800	105	17,077	1,859	18,936

GLOSTER.

1	Axles	12	10	3	2	2	2	—	—	5	4	9
2	Bookbinders	—	—	3	—	4	—	—	—	7	—	7
9	Boots and shoes	18	—	590	342	264	116	39	4	893	462	1,355
1	Brushes	—	—	56	—	5	—	—	—	61	—	61
1	Builder	—	—	11	5	5	1	3	1	19	7	26
5	Carriages and wagons.	119	—	761	—	159	—	13	—	933	—	933
1	Chains	10	—	40	—	10	—	—	—	50	—	50
4	Chemicals	156	20	460	—	103	—	7	—	570	—	570
8	Clothing	25	15	117	720	29	189	4	1	150	910	1,060
1	Cocoa	100	—	50	70	21	46	3	3	74	119	193
1	Colours	25	—	51	—	4	—	—	—	55	—	55
1	Cotton winding	—	—	—	30	—	8	—	5	—	43	43
26	Engineers	245	—	1,268	1	384	—	2	—	1,654	1	1,655
20	Founders	110	16	332	—	112	—	18	—	462	—	462
1	Furniture	30	—	40	—	10	—	—	—	50	—	50
4	Glass	14	—	104	1	63	—	20	—	187	1	188
1	Hats and caps	—	—	24	33	6	14	1	—	31	47	78
10	Iron manufacturers,	587	192	568	39	151	41	46	13	765	93	858
3	Leather	47	8	181	7	6	—	3	—	190	7	197
1	Nails	34	—	41	—	41	—	33	—	115	—	115

GLOSTER—*continued.*

Number of Firms.	Kinds of Trades.	Horse-Power employed.		Persons employed.								Total.
				Adults.		Young Persons.		Children.		Total of both Sexes.		
		Steam.	Water.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
5	Paper - -	392	84	175	265	22	157	15	24	212	446	658
1	do. bags -	—	—	2	10	—	3	—	—	2	13	15
4	Pins - -	22	28	42	51	13	27	15	4	70	82	152
35	Printers - -	32	—	211	17	36	7	9	—	256	24	280
7	Do. and binders	30	—	125	66	122	49	9	3	256	118	374
3	Saw-mills -	62	—	121	9	18	9	8	1	147	19	166
3	Ships and boats	84	—	216	—	32	—	5	—	253	—	253
1	Shot - -	40	—	18	—	5	—	1	—	24	—	24
1	Slate dresser -	95	—	52	—	2	—	—	—	54	—	54
5	Smelters -	346	—	265	—	30	—	18	—	313	—	313
2	Smiths - -	5	—	8	—	3	—	—	—	11	—	11
1	Spirits - -	48	—	60	—	—	—	—	—	60	—	60
1	Sugar refining -	448	—	588	—	21	—	—	—	609	—	609
3	Tobacco - -	37	—	56	91	2	48	—	18	58	157	215
1	Tubes - -	3	—	8	—	4	—	—	—	12	—	12
4	Turners -	16	—	131	—	25	—	2	—	158	—	158
2	Umbrellas -	14	28	130	86	43	20	24	70	197	176	373
1	Wire - -	120	—	96	—	10	—	4	—	110	—	110
1	Woollen - -	—	—	30	40	6	16	—	—	36	56	92
182	Total - -	3,326	401	7,034	1,885	1,773	753	302	147	9,109	2,785	11,894

HANTS.

13	Bookbinders -	—	—	14	1	14	1	—	—	28	2	30
1	Bricks and tiles	4	—	16	—	2	—	—	—	18	—	18
1	Brushes -	9	—	32	8	8	2	1	—	41	10	51
1	Carriages and wagons.	—	—	75	1	15	—	—	—	90	1	91
1	Cement - -	56	25	120	—	16	—	—	—	136	—	136
17	Engineers -	134	10	796	—	139	—	11	—	946	—	946
15	Founders -	36	—	121	—	34	—	—	—	155	—	155
1	Galvanizer -	—	—	22	—	20	—	—	—	42	—	42
1	Gas - -	8	—	93	—	4	—	1	—	98	—	98
7	Paper - -	36	109	95	123	26	44	14	—	135	167	302

HANTS—*continued.*

Number of Firms.	Kinds of Trades.	Horse-Power employed.		Persons employed.								Total.
				Adults.		Young Persons.		Children.		Total of both Sexes.		
		Steam.	Water.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
52	Printers	20	—	190	—	132	—	1	—	323	—	323
14	Do. and binders	1	—	33	—	38	—	—	—	71	—	71
3	Saw-mills	78	—	80	—	1	—	1	—	82	—	82
1	Soda Water	4	—	44	—	14	—	—	—	58	—	58
1	Tobacco	4	—	13	3	6	4	9	—	28	7	35
1	Tubes	4	—	2	—	—	—	—	—	2	—	2
130	Total	394	144	1,746	136	469	51	38	—	2,253	187	2,440

HEREFORD.

4	Engineers	30	4	67	1	16	—	4	3	87	4	91
2	Founders	16	—	47	—	4	—	—	—	51	—	51
10	Printers	16	—	66	3	15	—	2	—	83	3	86
1	Do. and binders	—	—	4	—	7	1	—	—	11	1	12
17	Total	62	4	184	4	42	1	6	3	232	8	240

HERTS.

1	Bricks and tiles	—	—	13	—	7	—	7	—	27	—	27
3	Engineers	18	—	145	—	17	—	3	—	165	—	165
9	Founders	18	—	44	—	13	—	1	—	58	—	58
7	Paper	288	55	218	264	79	28	32	4	329	296	625
12	Printers	15	—	42	2	42	—	10	—	94	2	96
7	Do. and binders	5	—	78	1	22	—	—	—	100	1	101
8	Straw bonnets	—	—	56	375	20	65	10	3	86	443	529
1	Turner	12	—	45	—	14	—	2	—	61	—	61
1	Wire	3	—	5	—	2	—	—	—	7	—	7
49	Total	259	55	646	642	216	93	65	7	927	742	1,669

LANCASTER.

Number of Firms.	Kinds of Trades.	Horse-Power employed.		Persons employed.								Total.
				Adults.		Young Persons.		Children.		Total of both Sexes.		
		Steam.	Water.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
1	Anchors	20	—	—	—	—	—	—	—	—	—	—
3	Bedsteads	11	—	22	—	17	—	1	—	40	—	40
1	Bobbins	60	20	179	2	31	—	34	—	244	2	246
14	Boilers	105	—	507	—	105	—	10	—	622	—	622
24	Bolts, rivets, &c.	128	—	298	11	129	2	137	2	564	15	579
20	Bookbinders	—	—	90	60	50	40	7	4	147	104	251
2	Brewers	12	—	64	—	15	—	1	—	80	—	80
2	Bricks and tiles	24	—	73	—	6	—	1	—	80	—	80
1	Builder	20	—	135	—	20	—	1	—	156	—	156
6	Carriages and wagons.	538	—	1,177	—	175	—	27	—	1,379	—	1,379
21	Chemicals	375	—	3,065	6	314	—	40	—	3,419	6	3,425
1	Clog-irons	—	—	2	—	3	—	2	—	7	—	7
9	Clothing	8	—	12	231	7	123	1	6	20	360	380
2	Copper mills	280	—	58	—	23	—	1	—	82	—	82
1	Draper	—	—	19	39	10	6	—	—	29	45	74
139	Engineers	2,432	3	10,995	5	2,312	7	287	3	13,594	15	13,609
2	Flour mills	430	—	237	6	69	—	—	—	306	6	312
97	Founders	849	12	3,147	17	1,092	3	115	—	4,354	20	4,374
8	Furniture	20	—	302	201	56	39	—	—	358	240	598
2	Gas	137	—	673	1	30	—	—	—	703	1	704
1	Gates & hurdles	—	—	10	—	10	—	—	—	20	—	20
23	Glass	1,187	—	2,838	639	700	279	262	5	3,800	923	4,723
1	Do. cutting	2	—	2	—	2	—	—	—	4	—	4
2	Gold-thread	12	—	16	27	1	59	1	18	18	104	122
2	Grinders and polishers.	6	—	4	—	1	—	—	—	5	—	5
1	Guns and pistols	16	—	100	—	5	—	—	—	105	—	105
19	Hats and caps	121	—	733	350	111	148	29	10	873	508	1,381
3	India-rubber	181	—	191	125	30	65	—	—	221	190	411
12	Iron manufacturers.	5,213	—	4,054	—	505	—	110	—	4,669	—	4,669
1	Do. kegs	—	—	2	—	3	—	2	—	7	—	7
1	Do. washers	6	—	1	—	—	—	1	—	2	—	2
3	Leather	71	—	249	—	46	—	15	—	310	—	310

LANCASTER—*continued.*

Number of Firms.	Kinds of Trades.	Horse-Power employed.		Persons employed.								Total.
				Adults.		Young Persons.		Children.		Total of both Sexes.		
		Steam.	Water.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
1	Locks and keys	12	—	50	—	14	—	10	—	74	—	74
1	Nails	8	—	10	—	4	—	14	—	28	—	28
1	Oil	6	—	14	41	2	5	—	—	16	46	62
1	Oiled baize	4	—	60	—	7	—	—	—	67	—	67
28	Paper	2,229	280	1,083	511	248	129	135	47	1,466	687	2,153
1	Pottery	25	—	55	—	26	—	3	—	84	—	84
105	Printers	175	1	914	109	358	95	87	5	1,359	209	1,568
38	Do. and binders	102	—	559	136	57	183	55	23	671	342	1,013
1	Rails	20	—	53	—	5	—	—	—	58	—	58
4	Roller manufacturers.	32	52	173	—	55	—	17	—	245	—	245
4	Rope	104	—	1,219	79	83	49	7	—	1,309	128	1,437
2	Safes	90	—	398	—	13	—	1	—	412	—	412
1	Salt	4	—	40	—	3	—	—	—	43	—	43
1	Saw-mill	50	—	65	—	6	—	1	—	72	—	72
1	Seed crusher	100	—	85	—	—	—	—	—	85	—	85
5	Ships and boats	239	—	1,779	399	—	—	—	—	1,779	399	2,178
2	Silk	—	—	6	7	—	13	22	95	28	115	143
12	Smelters	1,104	—	2,090	139	241	48	72	2	2,403	189	2,592
11	Smiths	76	—	371	—	75	—	2	—	448	—	448
2	Spades	21	—	80	—	35	—	1	—	116	—	116
1	Spirits	80	—	65	—	10	—	—	—	75	—	75
9	Sugar refining	1,095	—	540	—	46	—	—	—	586	—	586
23	Tobacco	95	—	265	495	122	341	112	20	499	856	1,355
11	Tools	81	—	375	14	101	—	10	—	486	14	500
3	Tubes	53	—	129	—	46	—	14	—	189	—	189
1	Watches	4	—	38	1	3	3	—	—	41	4	45
2	Wheels	52	—	86	—	11	—	8	—	105	—	105
8	Wire	216	—	379	—	130	1	3	—	512	1	513
705	Total	18,341	368	40,236	3,651	7,579	1,638	1,659	240	49,474	5,529	55,003

LEICESTER.

Number of Firms.	Kinds of Trades.	Horse-Power employed.		Persons employed.								Total.
				Adults.		Young Persons.		Children.		Total of both Sexes.		
		Steam.	Water.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
2	Bobbins	36	—	68	4	25	13	25	1	118	18	136
2	Bookbinders	—	—	5	1	1	—	1	—	7	1	8
24	Boots and shoes	89	—	1,099	844	310	295	68	104	1,477	1,243	2,720
1	Bricks and tiles	38	—	77	1	35	5	29	3	141	9	150
1	Carriages and wagons.	8	—	48	—	14	—	—	—	62	—	62
1	Clothing	—	—	21	47	—	11	—	—	21	58	79
1	Cutler	3	—	16	—	3	—	—	—	19	—	19
12	Engineers	100	—	380	—	98	—	6	—	484	—	484
14	Founders	56	—	212	1	56	—	2	—	270	1	271
2	Hats and caps	4	—	57	69	13	60	1	1	71	130	201
3	Hosiers	—	—	75	50	26	27	10	1	111	78	189
1	India-rubber	50	12	22	—	11	—	—	—	33	—	33
1	Leather	8	—	43	—	10	—	—	—	53	—	53
1	Nails	4	—	25	7	6	5	1	—	32	12	44
1	Paper	18	26	20	21	4	4	1	—	25	25	50
26	Printers	12	—	55	—	42	2	7	—	104	2	106
10	Do. and binders	—	—	72	7	38	16	3	1	113	24	137
1	Smith	4	—	2	—	2	—	—	—	4	—	4
3	Tobacco	—	—	59	35	67	50	10	25	136	110	246
107	Total	430	38	2,356	1,087	761	488	164	136	3,281	1,711	4,992

MERIONETH.

2	Printers	—	—	8	—	6	—	2	—	16	—	16
11	Quarries	188	355	2,095	—	276	—	108	—	2,479	—	2,479
13	Total	188	355	2,103	—	282	—	110	—	2,495	—	2,495

MONMOUTH.

1	Bobbins	25	—	15	—	16	—	8	—	39	—	39
1	Bolts, rivets, &c.	150	—	287	30	92	17	42	2	421	49	470
1	Charcoal	40	—	25	—	2	—	—	—	27	—	27
10	Engineers	177	—	668	1	102	—	35	—	805	1	806

MONMOUTH—*continued.*

Number of Firms.	Kinds of Trades.	Horse-Power employed.		Persons employed.								Total.
				Adults.		Young Persons.		Children.		Total of both Sexes.		
		Steam.	Water.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
4	Founders - -	20	—	22	—	10	—	—	—	32	—	32
13	Iron manufacturers.	1,586	495	3,987	271	662	263	243	26	4,892	560	5,452
1	Nails - -	150	—	430	—	232	—	105	—	767	—	767
2	Paper - -	162	60	50	35	5	—	2	—	57	35	92
10	Printers -	—	—	29	14	20	—	2	—	51	14	65
5	Do. and binders	—	—	13	—	16	—	1	—	30	—	30
1	Rails - - -	40	—	88	—	12	—	—	—	100	—	100
6	Smelters - -	2,200	—	2,300	164	256	48	32	2	2,588	214	2,802
2	Smiths - -	13	—	161	—	30	—	2	—	193	—	193
1	Tobacco - -	6	—	5	2	6	1	3	—	14	3	17
1	Tubes - -	30	—	100	—	15	—	14	—	129	—	129
2	Wire - -	178	10	120	—	39	—	9	—	168	—	168
61	Total - -	4,777	565	8,300	517	1,515	329	498	30	10,313	876	11,189

MONTGOMERY.

2	Engineers -	16	8	30	—	3	—	—	—	33	—	33
1	Founder - -	20	—	25	—	10	—	—	—	35	—	35
1	Lead - -	45	110	158	22	31	15	11	3	200	40	240
3	Printers - -	—	—	8	—	6	—	2	—	16	—	16
2	Do. and binders	2	—	4	—	2	—	—	—	6	—	6
2	Smelters - -	75	140	260	32	43	18	15	7	318	57	375
11	Total - -	158	258	485	54	95	33	28	10	608	97	705

NORTHAMPTON.

1	Bookbinder -	1	—	12	3	12	2	10	4	34	9	43
26	Boots and shoes	40	—	1,205	468	354	329	64	83	1,623	880	2,503
1	Brewer - -	40	—	34	—	3	—	—	—	37	—	37
1	Clothing -	—	—	29	54	2	17	—	5	31	76	107
14	Engineers -	175	—	1,155	—	208	—	10	—	1,373	—	1,373
2	Founders	17	—	89	—	12	—	—	—	101	—	101

NORTHAMPTON—*continued.*

Number of Firms.	Kinds of Trades.	Horse-Power employed.		Persons employed.								Total.
				Adults.		Young Persons.		Children.		Total of both Sexes.		
		Steam.	Water.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
2	Iron manufacturers.	170	—	103	—	29	—	6	—	138	—	138
1	Leather - -	12	—	60	—	6	—	—	—	66	—	66
2	Paper - -	64	25	33	24	5	4	5	3	43	31	74
12	Printers -	11	—	45	—	26	2	4	1	75	3	78
1	Railway Chairs	7	—	16	9	—	—	—	—	16	9	25
1	Smelter -	50	—	30	—	2	—	—	—	32	—	32
64	Total - -	597	25	2,811	558	659	354	99	96	3,569	1,008	4,577

OXFORD.

9	Bookbinders -	—	—	36	12	17	3	—	—	53	15	68
1	Bricks and tiles	—	—	17	1	7	1	4	—	28	2	30
1	Clothing - -	12	—	60	—	20	—	—	—	80	—	80
3	Engineers -	60	—	382	—	101	—	12	—	495	—	495
5	Founders -	16	—	98	—	7	—	—	—	105	—	105
1	Gloves - -	—	—	—	50	—	—	—	—	—	50	50
7	Paper - -	197	221	108	91	27	6	8	2	143	99	242
24	Printers -	29	—	122	—	120	1	24	—	266	1	267
3	Do. and binders	—	—	9	—	6	—	—	—	15	—	15
54	Total - -	314	221	832	154	305	11	48	2	1,185	167	1,352

PEMBROKE.

1	Founder - -	4	—	4	—	2	—	—	—	6	—	6
3	Printers -	—	—	9	—	4	—	1	—	14	—	14
1	Do. and binder	—	—	4	—	1	—	—	—	5	—	5
1	Smelter - -	70	—	23	1	2	—	—	—	25	1	26
1	Ships and boats	40	—	204	—	36	—	—	—	240	—	240
7	Total - -	114	—	244	1	45	—	1	—	290	1	291

RUTLAND.

Number of Firms.	Kinds of Trades.	Horse-Power employed.		Persons employed.								Total.
				Adults.		Young Persons.		Children.		Total of both Sexes.		
		Steam.	Water	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
1	Printer - -	—	—	2	—	1	—	—	—	3	—	3

SALOP.

10	Engineers -	149	40	684	—	109	—	12	—	805	—	805
8	Founders -	36	16	569	—	165	—	45	—	779	—	779
3	Horsehair -	10	—	11	87	2	18	17	37	30	142	172
2	Iron manufacturers.	70	—	379	35	78	4	14	5	471	44	515
1	Paper - -	17	20	4	3	1	1	2	—	7	4	11
4	Printers - -	5	—	12	—	13	—	—	—	25	—	25
5	Do. and binders	6	—	33	3	17	2	3	1	53	6	59
1	Saw-mill - -	35	—	69	—	29	—	—	—	98	—	98
8	Smelters -	700	—	1,516	126	224	21	115	12	1,855	159	2,014
1	Turner - -	10	—	28	—	6	—	4	—	38	—	38
1	Wire - - -	60	—	51	1	26	—	6	—	83	1	84
44	Total - -	1,098	76	3,356	255	670	46	218	55	4,244	356	4,600

SOMERSET.

7	Bookbinders -	—	—	18	1	12	3	—	—	30	4	34
1	Boots and shoes	8	—	104	142	30	28	8	5	142	175	317
3	Bricks and tiles	62	—	136	31	40	3	16	1	192	35	227
1	Brushes -	—	—	33	—	12	—	6	—	51	—	51
2	Carriages and wagons.	6	—	133	—	14	—	—	—	147	—	147
1	Clothing - -	—	—	80	5	20	—	—	15	100	20	120
3	Collars - -	—	—	6	186	7	119	1	54	14	359	373
12	Engineers -	155	40	1,346	—	72	—	9	—	1,427	—	1,427
24	Founders - -	131	6	640	—	101	—	3	—	744	—	744
1	Furniture -	8	—	68	2	8	—	—	—	76	2	78
1	Glass - -	75	—	250	5	100	10	35	—	385	15	400
11	Gloves - -	—	—	598	618	141	79	65	28	804	725	1,529
1	Hollow-ware -	—	—	6	—	4	—	1	—	11	—	11
3	Horsehair	3	—	32	128	17	69	24	72	73	269	342

SOMERSET—*continued.*

Number of Firms.	Kinds of Trades.	Horse-Power employed.		Persons employed.								Total.
				Adults.		Young Persons.		Children.		Total of both Sexes.		
		Steam.	Water.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
9	Paper	189	217	109	151	16	14	6	2	131	167	298
50	Printers	16	3	87	2	110	—	6	—	203	2	205
27	Do. and binders.	—	12	96	53	92	38	14	—	202	91	293
1	Ships and boats	4	—	33	—	4	—	—	—	37	—	37
3	Smelters	90	—	136	—	—	—	—	—	136	—	136
5	Tools	—	143	137	—	23	—	4	—	164	—	164
1	Tubes	—	—	2	—	2	—	—	—	4	—	4
1	Wire	10	100	50	—	8	—	—	—	58	—	58
168	Total	757	521	4,100	1,324	833	363	198	177	5,131	1,864	6,995

STAFFORD.

3	Anchors	49	—	84	—	41	—	2	—	127	—	127
11	Awl blades	31	—	88	5	15	1	6	—	109	6	115
11	Axles	142	—	232	1	39	—	4	—	275	1	276
2	Bedsteads	12	—	19	4	10	3	4	—	33	7	40
19	Boilers	138	—	262	—	74	—	25	—	361	—	361
43	Bolts, rivets, &c.	737	—	1,528	544	432	296	335	54	2,295	894	3,189
5	Bookbinders	—	—	6	12	3	13	2	6	11	31	42
17	Boots and shoes	5	—	817	547	206	57	53	56	1,076	660	1,736
4	Braziers	6	—	105	28	59	5	12	1	176	34	210
24	Bricks and tiles	654	—	648	282	183	302	41	18	872	602	1,474
1	Brushes	3	—	12	—	3	—	—	—	15	—	15
8	Buckles	35	—	103	63	114	52	19	10	236	125	361
1	Carriages and wagons.	45	—	204	—	28	—	—	—	232	—	232
13	Chains	249	—	587	15	159	9	81	—	827	24	851
1	Chandeliers	20	—	27	7	10	1	—	1	37	9	46
4	Chemicals	76	—	280	12	30	63	11	7	321	82	403
1	Cooper	50	—	74	—	11	—	—	—	85	—	85
1	Copper mill	6	—	19	—	5	—	—	—	24	—	24
1	Cornices	3	—	8	1	2	—	—	—	10	1	11
2	Electro platers	10	—	82	18	36	14	8	—	126	32	158
44	Engineers	1,106	—	3,922	26	803	16	46	4	4,771	46	4,817

STAFFORD—*continued.*

Number of Firms.	Kinds of Trades.	Horse-Power employed.		Persons employed.								Total.
				Adults.		Young Persons.		Children.		Total of both Sexes.		
		Steam.	Water.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
2	Fitters	10	—	12	3	6	—	1	—	19	3	22
124	Founders	1,274	—	3,510	270	1,095	107	318	9	4,923	386	5,309
4	Galvanizers	82	—	316	4	40	2	3	—	359	6	365
1	Gas	—	—	125	—	—	—	—	—	125	—	125
4	Gates & hurdles	37	—	97	1	70	—	7	—	174	1	175
17	Glass manufacturers.	732	—	2,334	225	668	41	30	—	3,032	266	3,298
12	Do. cutters	108	—	105	17	57	9	13	—	175	26	201
1	Grates	12	—	33	5	1	1	12	—	46	6	52
	Gridirons	2	—	1	—	—	—	—	—	1	—	1
2	Grinders and polishers.	20	—	5	—	1	—	1	—	7	—	7
5	Guns and pistols	69	35	80	3	13	1	5	1	98	5	103
11	Gun-locks	78	—	191	33	67	13	17	—	275	46	321
9	Harness	21	—	215	54	41	15	9	2	265	71	336
3	Hinges	19	—	62	12	16	—	11	—	89	12	101
3	Hollow-ware	24	—	50	1	26	4	—	—	76	5	81
4	Horse-shoes and tips.	109	—	117	69	31	57	7	6	155	132	287
131	Iron manufacturers.	15,224	206	19,869	466	4,368	163	946	16	25,183	645	25,828
5	Do. washer manufacturers.	45	—	33	62	2	32	5	5	40	99	139
20	Japanners	92	—	675	474	209	236	42	32	926	742	1,668
3	Leather	24	—	232	—	12	—	2	—	246	—	246
16	Locks and keys	28	—	457	57	138	36	40	1	635	94	729
1	Manure	60	—	71	45	3	7	—	—	74	52	126
4	Metal mounters	21	—	49	22	11	15	—	6	60	43	103
4	Nails	189	—	164	123	67	61	17	6	248	190	438
3	Paper	134	—	33	40	7	9	9	—	49	49	98
74	Printers	32	—	239	3	143	6	24	—	406	9	415
9	Do. and binders.	8	—	40	2	29	8	11	—	80	10	90
1	Rails	122	—	170	—	32	8	—	—	202	8	210
1	Rugs	4	—	1	—	2	1	—	—	3	1	4
2	Sash pullies	2	—	6	3	4	2	1	—	11	5	16
1	Screw propeller manufacturer.	3	—	11	—	—	—	—	—	11	—	11
1	Scythes	2	—	1	3	7	2	1	—	9	5	14
1	Ships and boats	3	—	2	—	4	—	—	—	6	—	6

STAFFORD—*continued.*

Number of Firms.	Kinds of Trades.	Horse-Power employed.		Persons employed.								Total.
				Adults.		Young Persons.		Children.		Total of both Sexes.		
		Steam.	Water.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
2	Ship sheathing manufacturers	380	—	295	13	57	—	2	—	354	13	367
34	Smelters - -	4,230	—	3,036	26	487	8	150	1	3,673	35	3,708
6	Smiths - -	47	—	140	—	30	—	12	—	182	—	182
2	Spades - -	32	—	53	19	21	9	—	—	74	28	102
6	Springs - -	81	—	249	17	71	9	18	4	338	30	368
2	Stampers and piercers.	16	—	31	8	9	10	3	1	43	19	62
1	Swords - -	8	—	10	3	3	—	—	—	13	3	16
2	Tobacco - -	8	—	7	2	2	3	—	—	9	5	14
8	Tools - -	371	89	521	9	121	4	25	—	667	13	680
3	Toys - -	8	—	32	30	7	26	2	—	41	56	97
1	Traps - - -	6	—	8	—	3	—	4	—	15	—	15
5	Trays - -	24	—	79	17	21	14	5	1	105	32	137
22	Tubes - -	713	—	1,416	19	579	11	109	1	2,104	31	2,135
1	Turner - -	16	—	12	—	2	—	—	—	14	—	14
1	Turn-tables -	12	—	6	—	—	—	—	—	6	—	6
1	Varnish - -	12	—	33	16	1	1	—	—	34	17	51
1	Wheels - -	70	—	320	—	66	—	9	—	395	—	395
5	Wire - -	25	16	50	—	10	—	3	—	63	—	63
799	Total -	28,981	346	44,611	3,741	10,923	1,763	2,523	249	58,057	5,753	63,810

WARWICK.

1	Ammunition -	18	—	21	152	2	122	—	—	23	274	297
1	Anvils and vices	4	—	9	—	1	—	—	—	10	—	10
1	Awl-blades -	3	—	17	—	2	5	—	—	19	5	24
4	Axles - -	44	—	135	—	15	—	5	—	155	—	155
19	Bedsteads - -	205	—	960	321	343	59	73	3	1,376	383	1,759
1	Bells - -	20	—	99	9	46	7	10	—	155	16	171
1	Bellows - -	8	—	6	2	12	—	—	—	18	2	20
1	Birdcages -	3	—	10	4	8	1	—	—	18	5	23
1	Blacking - -	—	—	11	13	2	13	—	5	13	31	44
4	Boilers - -	11	—	26	—	15	—	—	—	41	—	41
30	Bolts, rivets, &c,	401	—	331	663	262	109	52	12	645	784	1,429

WARWICK—*continued.*

Number of Firms.	Kinds of Trades.	Horse-Power employed.		Persons employed.								Total.
				Adults.		Young Persons.		Children.		Total of both Sexes.		
		Steam.	Water.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
15	Bookbinders -	—	—	52	46	23	36	—	13	75	95	170
4	Book-clasps -	11	—	71	93	23	18	9	5	103	116	219
	Boots and shoes	—	—	55	117	10	71	—	—	65	188	253
5	Brass finishing -	3	—	30	6	16	2	5	—	51	8	59
2	Do. ornaments	—	—	15	—	3	—	2	—	20	—	20
1	Do. plating -	—	—	2	2	4	6	—	—	6	8	14
2	Do. taps - -	20	—	136	18	47	9	22	3	205	30	235
2	Braziers - -	14	—	120	10	26	—	—	—	146	10	156
1	Brewer - -	19	—	90	—	3	—	—	—	93	—	93
6	Bricks and tiles	55	—	157	—	60	—	35	—	252	—	252
5	Britannia metal	24	—	53	29	22	21	3	—	78	50	128
1	Builder - -	—	—	20	—	1	—	—	—	21	—	21
40	Buttons - -	171	—	696	1,655	202	662	172	460	1,070	2,777	3,847
5	Candlesticks -	42	—	31	8	9	8	—	—	40	16	56
4	Carriages and wagons.	164	—	1,092	2	482	4	—	—	1,574	6	1,580
1	Cart-arms -	2	—	5	—	—	—	—	—	5	—	5
1	Castors - -	—	—	—	—	3	—	—	—	3	—	3
3	Cement - -	108	—	235	11	14	5	—	—	249	16	265
6	Chains - -	12	—	37	57	25	52	6	12	68	121	189
13	Chandeliers -	55	—	550	169	258	46	79	3	887	218	1,105
1	Cisterns - -	—	—	2	—	1	—	1	—	4	—	4
1	Clocks - -	2	—	2	2	—	1	—	—	2	3	5
1	Clothing - -	1	—	64	66	9	5	—	—	73	71	144
1	Cocoa - -	25	—	23	26	7	39	2	3	32	68	100
2	Coffin furniture	—	—	21	29	10	4	1	—	32	33	65
1	Cooper - -	3	—	14	—	1	—	—	—	15	—	15
1	Copper caps -	10	—	45	100	10	50	—	—	55	150	205
1	Do. mill -	160	—	58	—	28	—	—	—	86	—	86
1	Do. smith -	5	—	29	14	20	5	—	—	49	19	68
1	Copying presses	4	—	6	—	2	—	—	—	8	—	8
6	Cork screws -	23	—	36	17	12	9	2	3	50	29	79
1	Cornices - -	—	—	4	2	—	—	—	1	4	3	7
1	Decorator -	12	—	170	—	55	—	—	—	25	—	225

WARWICK—*continued.*

Number of Firms.	Kinds of Trades.	Horse-Power employed.		Persons employed.								Total.
				Adults.		Young Persons.		Children.		Total of both Sexes.		
		Steam.	Water.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
6	Die-sinkers	11	—	60	48	38	53	8	13	106	114	220
1	Dog-collars	—	—	—	—	1	—	—	—	1	—	1
32	Electro-platers	265	—	1,274	430	291	218	23	17	1,588	665	2,253
65	Engineers	443	—	1,299	2	329	25	16	14	1,644	41	1,685
11	Fenders and fire-irons.	48	—	158	38	19	7	6	1	183	46	229
1	Ferrules	12	—	15	—	—	—	—	—	15	—	15
4	Fitters	16	—	51	4	13	—	—	—	64	4	68
10	Forks and spoons	154	15	242	182	112	44	36	4	390	230	620
186	Founders	561	—	3,381	632	1,503	386	387	56	5,271	1,074	6,345
1	Frames	4	—	3	4	1	4	1	4	5	12	17
4	Galvanizers	79	—	277	—	24	—	1	—	302	—	302
4	Gas	84	—	440	—	2	—	—	—	442	—	442
2	Gas nipples	18	—	57	7	40	5	—	—	97	12	109
1	Gates & hurdles	3	—	4	—	1	—	—	—	5	—	5
1	Gelatine	46	—	55	4	23	12	14	—	92	16	108
4	German silver	196	—	257	—	26	1	12	—	295	1	296
43	Glass	172	—	1,004	167	267	52	51	2	1,322	221	1,543
21	Do. cutting	325	—	41	8	47	1	3	—	91	9	100
7	Grates	44	—	168	4	42	—	11	—	221	4	225
66	Grinders and polishers.	360	—	196	62	85	12	12	—	293	74	367
8	Gun-locks	16	—	45	1	24	1	9	—	78	2	80
36	Guns and pistols	536	38	2,178	49	332	10	43	7	2,553	66	2,619
1	Handcuffs	4	—	7	—	2	—	—	—	9	—	9
6	Harness	—	—	337	98	98	20	16	—	451	118	569
3	Hats and caps	54	—	227	92	35	60	6	1	268	153	421
4	Hinges	40	—	63	39	22	6	2	3	87	48	135
4	Hollow-ware	11	—	74	61	24	21	8	7	106	89	195
5	Hooks and eyes	33	—	56	58	38	70	12	14	106	142	248
5	India-rubber	33	—	14	26	21	19	3	10	38	55	93
8	Iron manufacturers.	288	—	294	33	53	5	20	6	367	44	411
3	Do. platers	8	—	23	1	5	—	—	—	28	1	29
11	Japanners	82	—	546	294	116	96	11	3	673	393	1,066
5	Jet ornaments	31	—	79	110	45	83	2	6	126	199	325

WARWICK—*continued.*

Number of Firms.	Kinds of Trades.	Horse-Power employed.		Persons employed.								Total.
				Adults.		Young Persons.		Children.		Total of both Sexes.		
		Steam.	Water.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
27	Jewellers	37	—	690	303	325	106	50	15	1,065	424	1,489
1	Lapidary	—	—	20	—	30	—	—	—	50	—	50
1	Lead	26	—	22	—	—	—	—	—	22	—	22
2	Locks and keys	10	—	64	1	16	1	3	—	83	2	85
1	Metal mounting	3	—	6	1	1	—	—	—	7	1	8
3	Do. refiner	18	—	49	11	1	2	—	—	50	13	63
6	Do. rolling	95	—	147	20	94	—	1	—	242	20	262
6	Do. spinning	113	—	23	—	6	—	—	—	29	—	29
24	Nails	374	—	580	319	222	191	49	23	849	533	1,382
18	Needles	67	31	176	48	46	58	18	11	240	117	357
1	Ornamental metal work.	—	—	31	3	14	—	1	—	46	3	49
13	Paper	221	—	145	176	97	50	14	4	256	230	486
1	Paper Bags	—	—	2	16	2	33	—	—	4	49	53
11	Pens	239	—	218	1,236	59	450	36	38	313	1,724	2,037
1	Penholders	12	—	11	23	5	15	—	2	16	40	56
2	Pewterers	4	—	29	1	9	—	—	—	38	1	39
21	Pins	156	—	271	174	90	144	13	52	374	370	744
1	Plumber	4	—	15	—	8	—	—	—	23	—	23
79	Printers	98	—	657	63	360	66	85	16	1,102	145	1,247
38	Do. and binders	17	—	209	54	88	32	6	11	303	97	400
1	Pumps	—	—	29	3	12	2	3	1	44	6	50
1	Purses	—	—	39	11	29	—	2	—	70	11	81
1	Quarries	86	—	160	1	12	—	2	—	174	1	175
1	Rifle sights	4	—	40	—	13	—	—	—	53	—	53
1	Rings	3	—	3	4	6	—	—	—	9	4	13
4	Rope	20	—	66	18	24	8	51	—	141	26	167
1	Rulers	3	—	19	11	3	7	2	1	24	19	43
2	Safes	10	—	25	—	4	—	4	—	33	—	33
1	Saw-mill	1	—	—	—	2	—	—	—	2	—	2
2	Scientific apparatus.	6	—	8	1	4	1	—	—	12	2	14
1	Ships' logs	4	—	24	1	3	—	—	—	27	1	28
1	Silk	—	—	40	140	14	30	—	—	54	170	224
5	Smiths	6	—	32	12	28	—	—	—	60	12	72

WARWICK—*continued.*

Number of Firms.	Kinds of Trades.	Horse-Power employed.		Persons employed.								Total.
				Adults.		Young Persons.		Children.		Total of both Sexes.		
		Steam.	Water.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
2	Spades - -	100	—	42	1	32	2	2	—	76	3	79
1	Spectacle frames	1	—	3	—	—	—	—	—	3	—	3
1	Spindles - -	1	—	1	2	3	4	3	—	7	6	13
4	Springs - -	38	—	102	38	21	4	3	—	126	42	168
1	Stair-rods -	4	—	7	2	1	—	—	—	8	2	10
10	Stampers and piercers.	46	—	73	36	30	33	18	1	121	70	191
1	Stoppers -	14	—	6	17	—	5	—	3	6	25	31
2	Swords - -	59	—	85	1	8	—	—	—	93	1	94
1	Table covers -	9	—	22	12	6	—	—	—	28	12	40
4	Thimbles - -	12	—	33	61	14	30	10	8	57	99	156
7	Tobacco -	23	—	39	30	15	46	2	2	56	78	134
23	Tools - -	474	15	789	42	138	4	30	—	957	46	1,003
12	Toys - -	61	—	283	52	59	52	20	7	362	111	473
21	Tubes - -	671	25	1,178	107	358	43	120	10	1,656	160	1,816
3	Turners - -	28	—	60	29	27	21	5	1	92	51	143
4	Umbrellas -	8	—	118	108	46	62	53	11	217	181	398
3	Watches -	6	—	234	—	68	—	—	—	302	—	302
25	Wire - -	1,377	30	1,213	94	271	43	97	3	1,581	140	1,721
2	Zinc rolling -	2	2	30	—	19	—	—	—	49	—	49
1,177	Total - -	10,210	156	26,639	9,380	8,516	4,125	1,893	911	37,048	14,416	51,464

WESTMORELAND.

2	Ammunition -	76	—	200	135	2	14	—	—	202	149	351
6	Bobbins - -	116	198	234	38	55	17	41	4	330	59	389
1	Bookbinder -	—	—	2	1	1	—	—	—	3	1	4
1	Boots and shoes	—	—	38	109	24	51	5	19	67	179	246
1	Carpet - -	—	—	103	12	13	9	15	10	131	31	162
1	Clothing -	10	—	11	—	8	—	2	—	21	—	21
2	Engineers -	10	6	76	—	16	—	—	—	92	—	92
1	Founder - -	4	—	11	—	—	—	—	—	11	—	11
1	Paper - -	54	30	22	6	8	4	3	—	33	10	43

WESTMORELAND—*continued.*

Number of Firms.	Kinds of Trades.	Horse-Power employed.		Persons employed.								Total.
				Adults.		Young Persons.		Children.		Total of both Sexes.		
		Steam.	Water.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
3	Printers -	—	—	15	—	8	—	—	—	23	—	23
3	Do. and binders	—	—	21	1	9	1	—	—	30	2	32
6	Tobacco - -	17	4	24	1	6	5	34	11	64	17	81
28	Total - -	287	238	757	303	150	101	100	44	1,007	448	1,455

WILTS.

1	Bookbinder -	—	—	4	—	6	—	—	—	10	—	10
1	Carpet - -	2	—	58	54	21	43	19	10	98	107	205
12	Engineers -	479	—	1,902	—	374	—	3	—	2,279	—	2,279
6	Founders - -	28	—	94	—	20	—	1	—	115	—	115
1	Guns and pistols	1	—	1	—	1	—	—	—	2	—	2
1	India-rubber -	30	15	39	12	2	—	—	—	41	12	53
1	Iron manufacturer.	200	20	154	—	18	—	—	—	172	—	172
4	Paper - -	—	42	17	24	4	4	2	1	23	29	52
16	Printers -	19	—	78	—	48	—	1	—	127	—	127
4	Do. and binders	—	—	10	1	8	—	—	—	18	1	19
1	Smith - -	4	—	7	—	2	—	—	—	9	—	9
2	Tobacco - -	10	6	16	—	19	—	—	—	35	—	35
50	Total - -	773	83	2,380	91	523	47	26	11	2,929	149	3,078

WORCESTER.

9	Anvils and vices	164	12	322	—	86	—	1	—	409	—	409
1	Axles - -	12	—	46	—	7	—	3	—	56	—	56
1	Bedsteads -	8	—	20	10	9	—	2	—	31	10	41
3	Boilers - -	83	—	158	4	32	1	8	—	198	5	203
3	Bolts, rivets, &c.	62	—	30	17	13	2	7	—	50	19	69
5	Bookbinders -	—	—	12	7	4	1	—	—	16	8	24
1	Boots and shoes	6	—	64	101	12	85	—	—	6	186	

WORCESTER—*continued.*

Number of Firms.	Kinds of Trades.	Horse-Power employed.		Persons employed.								Total.
				Adults.		Young Persons.		Children.		Total of both Sexes.		
		Steam.	Water.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
3	Bricks and tiles	80	—	191	99	30	39	—	—	221	138	359
1	Buttons	—	—	14	13	5	—	8	—	27	13	40
1	Carpet	—	—	104	42	9	18	39	8	152	68	220
2	Carriages and wagons.	96	—	444	2	88	—	8	—	540	2	542
4	Chains	39	—	100	—	6	—	27	1	133	1	134
1	Chandeliers	—	—	15	4	18	3	—	—	33	7	40
2	Chemicals	180	—	667	22	103	6	4	—	774	28	802
1	Collars	—	—	—	70	—	30	—	20	—	120	120
1	Copper mill	335	—	195	2	59	—	10	—	264	2	266
18	Engineers	316	—	1,843	3	356	2	13	1	2,212	6	2,218
6	Fenders and fire-irons.	56	—	94	11	40	—	2	—	136	11	147
4	Fishing-tackle	7	—	68	24	23	30	10	10	101	64	165
12	Founders	90	—	306	32	149	3	19	1	474	36	510
1	Gates and hurdles.	—	—	132	—	39	—	—	—	171	—	171
2	Glass	18	—	108	6	54	—	5	—	167	6	173
3	Do. cutters	22	—	23	1	30	—	—	—	53	1	54
5	Gloves	3	—	362	186	117	91	28	16	507	293	800
2	Grates	34	—	93	5	17	1	22	—	132	6	138
2	Guns and pistols	80	34	49	14	15	1	4	—	68	15	83
2	Hollow-ware	28	—	145	7	73	1	39	—	257	8	265
1	Horsehair	—	—	7	33	4	13	7	10	18	56	74
1	Horse-shoes and tips.	6	—	18	—	3	—	2	—	23	—	23
2	India-rubber	12	18	47	64	21	12	10	7	78	83	161
12	Iron manufacturers.	1,139	122	1,395	44	234	13	25	—	1,654	57	1,711
1	Jews-harps	—	—	3	—	7	—	—	—	10	—	10
1	Leather	8	—	60	—	1	—	—	—	61	—	61
1	Metal rolling	12	4	3	—	—	—	3	—	6	—	6
3	Nails	25	—	136	111	13	25	4	10	153	146	299
40	Needles	170	57	791	503	216	184	137	73	1,144	760	1,904
3	Paper	161	37	66	81	18	44	7	14	91	139	230
26	Printers	14	—	120	1	48	—	4	—	172	1	173
7	Do. and binders	—	—	21	3	22	1	1	—	44	4	48
2	Salt	100	—	309	—	113	—	14	—	436	—	436

WORCESTER—*continued.*

Number of Firms.	Kinds of Trades.	Horse-Power employed.		Persons employed.								Total.
				Adults.		Young Persons.		Children.		Total of both Sexes.		
		Steam.	Water.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
4	Scythes	36	60	56	—	5	—	3	—	64	—	64
9	Smelters	768	—	956	7	230	—	42	—	1,228	7	1,235
1	Smith	4	—	2	—	1	—	—	—	3	—	3
14	Spades	205	94	372	2	132	—	31	—	535	2	537
6	Swords	1	—	10	3	5	—	—	—	15	3	18
2	Tools	22	—	24	—	7	—	2	—	33	—	33
2	Tubes	50	—	122	—	100	—	36	—	258	—	258
4	Wire	144	30	183	—	25	—	7	—	215	—	215
238	Total	4,596	468	10,306	1,534	2,599	606	594	171	13,499	2,311	15,810

YORKSHIRE (PART OF).

2	Engineers	16	27	38	—	10	—	11	—	59	—	59
2	Founders	8	—	20	—	5	—	—	—	25	—	25
1	Paper	8	27	12	7	2	—	3	1	17	8	25
1	Printers	1	—	4	—	—	—	1	—	5	—	5
2	Smelters	—	10	11	—	—	—	—	—	11	—	11
8	Total	33	64	85	7	17	—	15	1	117	8	125

Works known to be under the Factory Acts Extension Act, 1867, in Ireland.

Table No. 6.

Summary of Counties in Ireland.

Counties.	Number of Firms.	Horse-Power employed.		Persons employed.								Total.
				Adults.		Young Persons.		Children.		Total of both Sexes.		
		Steam.	Water.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
Antrim - -	119	790	146	3,919	633	1,187	349	55	35	5,161	1,017	6,178
Armagh - -	13	58	60	291	31	73	2	13	—	377	33	410
Cavan - -	5	—	—	76	—	54	—	33	—	163	—	163
Clare - -	1	—	—	1	—	5	—	—	—	6	—	6
Cork - -	60	573	234	2,520	389	525	87	51	—	3,096	476	3,572
Down - -	24	263	—	1,444	147	207	51	25	3	1,675	201	1,876
Dublin - -	157	946	236	5,721	1,577	1,602	669	167	30	7,490	2,276	9,766
Fermanagh -	4	—	—	12	—	14	—	1	—	27	—	27
Galway - -	2	32	—	105	—	33	—	1	—	139	—	139
Kerry - -	2	—	—	3	—	1	—	—	—	4	—	4
Kilkenny - -	6	2	—	49	3	23	—	2	—	74	3	77
Limerick -	22	67	—	521	611	86	141	14	—	621	752	1,373
Londonderry -	24	143	—	454	1,362	167	348	25	2	646	1,712	2,358
Louth - -	11	129	10	521	3	96	—	7	—	624	3	627
Monaghan - -	3	—	—	6	—	2	—	—	—	8	—	8
Queen's County -	3	8	—	18	—	15	—	—	—	33	—	33
Tipperary - -	9	—	—	38	1	26	2	4	—	68	3	71
Tyrone - -	13	12	30	113	24	36	34	9	—	158	58	216
Waterford - -	16	28	—	363	2	99	1	9	—	471	3	474
Total - -	494	3,051	716	16,175	4,783	4,251	1,684	416	70	20,842	6,537	27,379

Table No. 7.

Summary of Trades.

Number of Firms.	Kinds of Trades.	Horse-Power employed.		Persons employed.								Total.
				Adults.		Young Persons.		Children.		Total of both Sexes.		
		Steam.	Water.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
1	Axles	4	—	17	—	1	—	—	—	18	—	18
3	Bacon curing	4	—	174	25	20	—	—	—	194	25	219
1	Bells	4	—	33	—	16	—	—	—	49	—	49
2	Boilers	17	—	35	—	6	—	1	—	42	—	42
16	Bookbinders	—	—	68	60	48	44	2	1	118	105	223
1	Boots and shoes	—	—	60	54	—	15	—	—	60	69	129
1	Boxes	—	—	11	58	8	26	—	—	19	84	103
9	Brewers	307	—	1,172	9	97	—	—	—	1,269	9	1,278
2	Bricks and tiles	20	—	97	9	22	8	—	—	119	17	136
1	Brushes	—	—	20	15	—	1	—	—	20	16	36
1	Candles	10	—	35	1	4	—	—	—	39	1	40
3	Carriages and wagons.	42	—	264	5	33	—	3	—	300	5	305
1	Chains	2	—	2	—	—	—	—	—	2	—	2
2	Chemicals	25	—	139	42	10	4	—	—	149	46	195
1	Clog-soles	32	—	102	—	30	—	—	—	132	—	132
21	Clothing	75	—	378	3,039	106	1,045	1	24	485	4,108	4,593
1	Collars	—	—	—	30	—	30	—	—	—	60	60
1	Damask	—	—	68	—	—	—	—	—	68	—	68
2	Embroidery	—	—	6	79	—	10	—	—	6	89	95
65	Engineers	948	28	6,736	33	1,324	10	65	—	8,125	46	8,171
1	Envelopes	—	—	2	12	1	34	—	—	3	54	57
1	Fitter	—	—	1	—	1	—	1	—	3	—	3
3	Flour mills	119	50	322	—	11	—	—	—	333	—	333
39	Founders	207	—	754	—	226	—	12	—	992	—	992
2	Furniture	26	—	14	194	1	15	—	—	15	209	224
2	Gas	48	—	154	2	2	—	—	—	156	2	158
1	Gates & hurdles	5	—	20	—	1	—	—	—	21	—	21
3	Glass	—	—	136	5	51	—	10	—	197	5	202
1	Handkerchiefs	4	—	6	46	2	28	—	1	8	75	83

SUMMARY OF TRADES—*continued.*

Number of Firms.	Kinds of Trades.	Horse-Power employed.		Persons employed.								Total.
				Adults.		Young Persons.		Children.		Total of both Sexes.		
		Steam.	Water.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
2	Harness	—	—	71	6	8	1	—	—	79	7	86
2	Hats and caps	2	—	64	44	8	11	—	—	72	55	127
1	Iron manufacturer.	—	—	50	—	5	—	—	—	55	—	55
1	Japanner	—	—	22	—	15	—	—	—	37	—	37
2	Lace	—	—	5	81	5	17	—	—	10	98	108
1	Leather	8	—	89	30	12	5	1	—	102	35	137
4	Linen	—	—	132	79	19	40	2	3	153	122	275
1	Manure	35	—	150	—	2	—	—	—	152	—	152
1	Oil	25	—	63	14	—	—	—	—	63	14	77
20	Paper	198	429	314	326	54	100	5	3	373	429	802
1	Pickles	—	—	19	9	19	—	—	—	38	9	47
1	Pins	—	10	5	10	4	—	—	—	9	10	19
1	Plumber	—	—	8	—	1	—	—	—	9	—	9
150	Printers	191	18	1,411	157	780	73	26	1	2,217	231	2,448
25	Do. and binders	77	—	597	282	347	159	22	26	966	467	1,433
2	Rope	24	—	67	6	56	4	—	—	123	10	133
1	Saw-mill	60	—	62	—	17	—	1	—	80	—	80
2	Ships and boats	20	—	448	—	56	—	5	—	509	—	509
1	Smelter	—	—	7	—	—	—	1	—	8	—	8
5	Smiths	12	—	90	—	17	—	1	—	108	—	108
2	Soda water	10	—	52	—	84	—	—	—	136		136
7	Spades	19	56	89	—	26	—	—	—	115	—	115
10	Spirits	431	125	875	7	20	—	—	—	895	7	902
61	Tobacco	35	—	616	6	659	4	256	—	1,531	10	1,541
2	Wire	5	—	43	8	16	—	1	—	60	8	68
494	Total	3,051	716	16,175	4,783	4,251	1,684	416	70	20,842	6,537	27,379

Table No. 8.

Works under the Factory Acts Extension Act, 1867, in Ireland, *October* 1868.

ANTRIM.

Number of Firms.	Kinds of Trades.	Horse-Power employed.		Persons employed.								Total.
				Adults.		Young Persons.		Children.		Total of both Sexes.		
		Steam.	Water.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
1	Bells	4	—	33	—	16	—	—	—	49	—	49
1	Boilers	7	—	10	—	2	—	—	—	12	—	12
6	Bookbinders	—	—	20	16	16	16	2	—	38	32	70
1	Boxes	—	—	11	58	8	26	—	—	19	84	103
1	Carriages and wagons.	10	—	29	—	—	—	3	—	32	—	32
6	Clothing	3	—	85	186	19	108	—	13	104	307	411
1	Collars	—	—	—	30	—	30	—	—	—	60	60
1	Damask	—	—	68	—	—	—	—	—	68	—	68
1	Embroidery	—	—	6	29	—	10	—	—	6	39	45
22	Engineers	372	—	2,010	—	508	—	15	—	2,533	—	2,533
1	Fitter	—	—	1	—	1	—	1	—	3	—	3
1	Flour mill	25	—	37	—	2	—	—	—	39	—	39
15	Founders	66	—	182	—	75	—	—	—	257	—	257
1	Gas	40	—	100	—	—	—	—	—	100	—	100
1	Handkerchiefs	4	—	6	46	2	28	—	1	8	75	83
1	Japanner	—	—	22	—	15	—	—	—	37	—	37
4	Linen	—	—	132	79	19	40	2	3	153	122	275
4	Paper	100	130	63	88	15	35	3	3	81	126	207
26	Printers	38	—	268	15	186	12	4	—	458	27	485
6	Do. and binders	9	—	237	77	153	44	6	15	396	136	532
1	Saw-mill	60	—	62	—	17	—	1	—	8	—	80
1	Ships and boats	10	—	280	—	4	—	—	—	284	—	284
3	Smiths	9	—	81	—	14	—	—	—	95	—	95
2	Spades	—	16	16	—	5	—	—	—	21	—	21
1	Spirits	20	—	84	—	10	—	—	—	94	—	94
9	Tobacco	8	—	58	1	88	—	18	—	164	1	165
1	Wire	5	—	18	8	12	—	—	—	30	8	38
119	Total	790	146	3,919	633	1,187	349	55	35	5,161	1,017	6,178

ARMAGH.

Number of Firms.	Kinds of Trades.	Horse-Power employed.		Persons employed.								Total.
				Adults.		Young Persons.		Children.		Total of both Sexes.		
		Steam.	Water.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
4	Engineers -	26	—	227	—	47	—	13	—	287	—	287
1	Paper - -	18	60	30	30	2	2	—	—	32	32	64
6	Printers -	4	—	17	1	17	—	—	—	34	1	35
1	Spades - -	10	—	15	—	2	—	—	—	17	—	17
1	Tobacco - -	—	—	2	—	5	—	—	—	7	—	7
13	Total - -	58	60	291	31	73	2	13	—	377	33	410

CAVAN.

3	Printers -	—	—	7	—	3	—	—	—	10	—	10
2	Tobacco - -	—	—	69	—	51	—	33	—	153	—	153
5	Total - -	—	—	76	—	54	—	33	—	163	—	163

CLARE.

1	Printer - -	—	—	1	—	5	—	—	—	6	—	6

CORK.

1	Bacon curing -	—	—	80	5	5	—	—	—	85	5	90
2	Bookbinders -	—	—	15	14	14	7	—	—	29	21	50
2	Brewers - -	104	—	331	4	11	—	—	—	342	4	346
1	Chemicals -	15	—	9	42	4	4	—	—	13	46	59
2	Clothing - -	—	—	11	48	—	37	—	—	11	85	96
9	Engineers -	116	20	976	—	142	—	—	—	1,118	—	1,118
2	Flour mills -	94	50	285	—	9	—	—	—	294	—	294
2	Founders -	—	—	3	—	—	—	—	—	3	—	3
2	Furniture -	26	—	14	194	1	15	—	—	15	209	224
1	Leather - -	8	—	89	30	12	5	1	—	102	35	137
2	Paper - -	—	39	21	19	5	2	2	—	28	21	49
1	Pickles - -	—	—	19	9	19	—	—	—	38	9	47
15	Printers -	6	—	123	15	44	16	—	—	167	31	198
3	Do. and binders	—	—	17	4	8	1	—	—	25	5	30

CORK—*continued.*

Number of Firms.	Kinds of Trades.	Horse-Power employed.		Persons employed.								Total.
				Adults.		Young Persons.		Children.		Total of both Sexes.		
		Steam.	Water.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
1	Spades - -	1	—	7	—	5	—	—	—	12	—	12
5	Spirits - -	182	125	399	5	5	—	—	—	404	5	409
9	Tobacco - -	21	—	121	—	241	—	48	—	410	—	410
60	Total - -	573	234	2,520	389	525	87	51	—	3,096	476	3,572

DOWN.

1	Bricks and tiles	16	—	60	—	6	—	—	—	66	—	66
3	Clothing - -	8	—	7	107	1	38	—	—	8	145	153
6	Engineers -	138	—	1,034	26	116	10	17	3	1,167	39	1,206
2	Founders - -	20	—	53	—	15	—	5	—	73	—	73
1	Glass - -	—	—	4	—	—	—	1	—	5	—	5
1	Manure - -	35	—	150	—	2	—	—	—	152	—	152
1	Oil - -	25	—	63	14	—	—	—	—	63	14	77
4	Printers - -	—	—	22	—	15	—	—	—		—	37
1	Do. and binders	—	—	4	—	4	1	2	—	10	1	11
1	Rope - -	10	—	28	—	38	—	—	—	66	—	66
1	Smith - -	3	—	2	—	3	—	—	—	5	—	5
1	Spades - -	8	—	16	—	6	—	—	—	22	—	22
1	Tobacco - -	—	—	1	—	—	2	—	—	1	2	3
24	Total - -	263	—	1,444	147	207	51	25	3	1,675	201	1,876

DUBLIN.

1	Axles - -	4	—	17	—	1	—	—	—	18	—	18
1	Boilers - -	10	—	25	—	4	—	1	—	30	—	30
5	Bookbinders -	—	—	28	29	17	21	—	1	45	51	96
1	Boots and shoes	—	—	60	54	—	15	—	—	60	69	129
5	Brewers - -	191	—	716	5	73	—	—	—	789	5	794
1	Brushes - -	—	—	20	15	—	1	—	—	20	16	36
1	Candles - -	10	—	35	1	4	—	—	—	39	1	40
1	Carriages and wagons.	8	—	84	4	21	—	—	—	105	4	109

DUBLIN—*continued.*

Number of Firms.	Kinds of Trades.	Horse-Power employed.		Persons employed.								Total.
				Adults.		Young Persons.		Children.		Total of both Sexes.		
		Steam.	Water.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
1	Chains	2	—	2	—	—	—	—	—	2	—	2
1	Chemicals	10	—	130	—	6	—	—	—	136	—	136
6	Clothing	6	—	85	841	34	365	—	9	119	1,215	1,334
18	Engineers	222	8	2,039	4	419	—	19	—	2,477	4	2,481
1	Envelopes	—	—	2	12	1	34	—	8	3	54	57
13	Founders	73	—	315	—	84	—	7	—	406	—	406
1	Gates and hurdles.	5	—	20	—	1	—	—	—	21	—	21
2	Glass	—	—	132	5	51	—	9	—	192	5	197
2	Harness	—	—	71	6	8	1	—	—	79	7	86
2	Hats and caps	2	—	64	44	8	11	—	—	72	55	127
1	Iron manufacturer.	—	—	50	—	5	—	—	—	55	—	55
1	Lace	—	—	5	26	5	1	—	—	10	27	37
11	Paper	80	200	190	189	28	61	—	—	218	250	468
1	Pins	—	10	5	10	4	—	—	—	9	10	19
53	Printers	141	18	793	121	408	41	19	1	1,220	163	1,383
11	Do. and binders	65	—	308	200	167	112	14	11	489	323	812
1	Rope	14	—	39	6	18	4	—	—	57	10	67
2	Soda water	10	—	52	—	84	—	—	—	136	—	136
2	Spirits	87	—	196	2	5	—	—	—	201	2	203
10	Tobacco	6	—	213	3	142	2	97	—	452	5	457
1	Wire	—	—	25	—	4	—	1	—	30	—	30
157	Total	946	236	5,721	1,577	1,602	669	167	30	7,490	2,276	9,766

FERMANAGH.

3	Printers	—	—	8	—	5	—	—	—	13	—	13
1	Tobacco	—	—	4	—	9	—	1	—	14	—	14
4	Total	—	—	12	—	14	—	1	—	27	—	27

GALWAY.

1	Clog-soles	32	—	102	—	30	—	—	—	132	—	132
1	Printer	—	—	3	—	3	—	1	—	7	—	7
2	Total	32	—	105	—	33	—	1	—	139	—	139

KERRY.

Number of Firms.	Kinds of Trades.	Horse-Power employed.		Persons employed.								Total.
				Adults.		Young Persons.		Children.		Total of both Sexes.		
		Steam.	Water.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
2	Printers - -	—	—	3	—	1	—	—	—	4	—	4

KILKENNY.

1	Brewer - -	2	—	24	—	13	—	—	—	37	—	37
3	Printers - -	—	—	19	3	5	—	—	—	24	3	27
2	Tobacco - -	—	—	6	—	5	—	2	—	13	—	13
6	Total - -	2	—	49	3	23	—	2	—	74	3	77

LIMERICK.

2	Bacon curing -	4	—	94	20	15	—	—	—	109	20	129
1	Carriages and wagons.	24	—	151	1	12	—	—	—	163	1	164
1	Clothing - -	24	—	65	483	—	125	—	—	65	608	673
1	Embroidery -	—	—	—	50	—	—	—	—	—	50	50
2	Founders - -	7	—	37	—	8	—	—	—	45	—	45
1	Gas - -	8	—	54	2	2	—	—	—	56	2	58
1	Lace - -	—	—	—	55	—	16	—	—	—	71	71
4	Printers - -	—	—	32	—	7	—	—	—	39	—	39
1	Smelter - -	—	—	7	—	—	—	1	—	8	—	8
1	Smith - -	—	—	7	—	—	—	1	—	8	—	8
7	Tobacco - -	—	—	74	—	42	—	12	—	128	—	128
22	Total - -	67	—	521	611	86	141	14	—	621	752	1,373

LONDONDERRY.

2	Bookbinders -	—	—	5	—	1	—	—	—	6	—	6
2	Clothing - -	34	—	122	1,359	51	346	—	2	173	1,707	1,880
1	Engineers -	8	—	45	—	5	—	—	—	50	—	50
2	Founders - -	25	—	87	—	25	—	—	—	112	—	112
6	Printers - -		—	41	1	30	2	—	—	71	3	74

LONDONDERRY—*continued.*

Number of Firms.	Kinds of Trades.	Horse-Power employed.		Persons employed.								Total.
				Adults.		Young Persons.		Children.		Total of both Sexes.		
		Steam.	Water.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
2	Do. and binders	3	—	17	—	9	—	—	—	26	—	26
1	Spirits - -	71	—	98	—	—	—	—	—	98	—	98
8	Tobacco - -	—	—	39	2	46	—	25	—	110	2	112
24	Total - -	143	—	454	1,362	167	348	25	2	646	1,712	2,358

LOUTH.

4	Engineers -	58	—	390	3	78	—	1	—	469	3	472
2	Paper - -	—	—	10	—	4	—	—	—	14	—	14
2	Printers - -	—	—	7	—	5	—	—	—	12	—	12
1	Spades - -	—	10	13	—	5	—	—	—	18	—	18
1	Spirits - -	71	—	98	—	—	—	—	—	98	—	98
1	Tobacco - -	—	—	3	—	4	—	6	—	13	—	13
11	Total - -	129	10	521	3	96	—	7	—	624	3	627

MONAGHAN.

2	Printers - -	—	—	2	—	2	—	—	—	4	—	4
1	Tobacco - -	—	—	4	—	—	—	—	—	4	—	4
3	Total - -	—	—	6	—	2	—	—	—	8	—	8

QUEEN'S COUNTY.

1	Engineers -	8	—	15	—	9	—	—	—	24	—	24
1	Printer - -	—	—	1	—	—	—	—	—	1	—	1
1	Tobacco - -	—	—	2	—	6	—	—	—	8	—	8
3	Total - -	8	—	18	—	15	—	—	—	33	—	33

TIPPERARY.

4	Printers -	—	—	24	1	14	2	—	—	38	3	41
5	Tobacco - -	—	—	14	—	12	—	4	—	30	—	30
9	Total - -	—	—	38	1	26	2	4	—	68	3	71

TYRONE.

Number of Firms.	Kinds of Trades.	Horse-Power employed.		Persons employed.								Total.
				Adults.		Young Persons.		Children.		Total of both Sexes.		
		Steam.	Water.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
1	Bricks and tiles	4	—	37	9	16	8	—	—	53	17	70
1	Clothing - -	—	—	3	15	1	26	1	—	5	41	46
1	Founder - -	8	—	30	—	4	—	—	—	34	—	34
7	Printers - -	—	—	14	—	8	—	2	—	24	—	24
1	Do. and binders	—	—	4	—	3	—	—	—	7	—	7
1	Spades - -	—	30	22	—	3	—	—	—	25	—	25
1	Tobacco - -	—	—	3	—	1	—	6	—	10	—	10
13	Total - -	12	30	113	24	36	34	9	—	158	58	216

WATERFORD.

1	Bookbinder -	—	—	—	1	—	—	—	—	—	1	1
1	Brewer - -	10	—	101	—	—	—	—	—	101	—	101
2	Founders -	8	—	47	—	15	—	—	—	62	—	62
1	Plumber - -	—	—	8	—	1	—	—	—	9	—	9
7	Printers - -	—	—	26	—	21	—	—	—	47	—	47
1	Do. and binder -	—	—	10	1	3	1	—	—	13	2	15
1	Ships and boats	10	—	168	—	52	—	5	—	225	—	225
2	Tobacco - -	—	—	3	—	7	—	4	—	14	—	14
16	Total - -	28	—	363	2	99	1	9	—	471	3	474

The object of compiling all these tables was threefold; first, to show the numbers of persons over whom the new Acts were to exercise an influence; secondly, the area over which the works were spread, so that the relative importance of the varied industry of any county might be ascertained; thirdly, the counties which had been considered most favourable for certain kinds of employment, or wherein the great trades were assembled in common. Let me, however, add that, these figures scarcely represent the number of employés that would have been shown had trade been good. Those, idle for want of work, in factories partially or wholly closed, would have materially augmented their number in many of the trades. They are also to be taken, as they have been returned to me: correct, so far as I know to the contrary: deficient in a few firms such as stay-makers located in Bristol, Bath, and Dublin, and a few others, that had not sent the required information in time. Deficient also in the slate quarries, whose right to be exempted from the law, has to be settled by the superior courts.

There are also other values in figures such as these, as I humbly think may be interesting to the statistician and to political economists.

First, we may by them be enabled to estimate the comparative magnitude of our industries in the country everywhere; and with that knowledge, to ascertain the consumption and production of every kind of article used or made, so far as we are inclined to extend our inquiries. For example, the same principle which gives us the fact that, every forty-horse engine, requires on the average five tons of coal a day of 10½ hours, would give us in every case, an approximate idea of every thing it might be useful to know, relative to the work the engine performed, and the proportionate parts of material required for the production, whatever it might be; and indeed the inquiry might be extended to the growth, and means of transit, of all consumptions and of all products with equal facility.

Secondly, we may be enabled to estimate the probable utility of the Factory Acts to the nation, in the liberty which their restriction of the hours of work in places of business of all kinds, gives to the population.

Thirdly, they may afford us an idea of the local energy needed to supply, or render schools and institutes of every kind available for the use of that liberty. And,

Fourthly, in the comparisons which future statisticians may be enabled to make from these data, imperfect though they be, of the development, or, it may be, of the cessation of similar industries, in the same localities, or with

other matters, of historical connexion between their times and those of 1868.

On one point, however, it is necessary I should offer a word of explanation, so far as those tables are concerned; and it is with regard to the enumeration of children. The numbers given, do not represent those compulsorily sent to school by the Factory Act, but only those under 13 years of age in the works when the returns were made, and that probably may have to attend school after the 1st of July 1870.

From these tables also, works under the Textile Acts and the Factory Acts Extension Act, 1864, are excluded.

The basis of the Factory Acts Extension Act, 1867, is, as to hours of work, among other things, that of the Factory Act, 1850; by which, it is not permitted to employ children, young persons, and females, from April 1st to September 30th before 6 a.m. nor after 6 p.m., nor after 2 p.m. on Saturdays; nor from October 1st to the 3rd of March, if the manufacturers desire to change these hours, before 7 a.m. nor after 7 p.m.; nor, again, after 2 p.m. on Saturdays, though on this latter day they may commence work at 6 p.m., in order to obtain the 60 hours a week. On this basis, out of the 5,578 new firms returned in the preceding tables, all are working, excepting, to the best of my knowledge, those to whom relaxations have been granted, and exclusive of those that are permitted to work in the night or in separate turns, &c. Of the exceptions, the largest proportion are printers, or printers and bookbinders. Afterwards follow, the manufacturers of paper, copper, tobacco, collars, bonnets, and salt. But, even of these trades, only small proportions of them under the law have applied for relaxations. For example, out of the total number of printers, and printers and bookbinders, in England and Wales and Ireland, amounting to 1,316, not more than 129 (*a*) have expressed a desire to change these hours for others more suitable to their appliances or conveniences. It is true that, many individual applications have been made by manufacturers in other trades, and in three or four instances they have spoken for their trades collectively, for concessions which have not been granted; but upon the whole, the applicants have been so few as to afford a fair inference that, there has never been any serious objection to factory hours amongst those to whom the restrictions have been applied. On the other hand, I have had several applications made to me to know whether, having fallen in with the hours of six to six, and become used to them, there was any legal necessity imposed

(*a*) *Note.*—This number has been increased since October 1868 to more than 200.

upon the occupiers to change them during the winter months to seven to seven.

On a review of what I consider to be the feeling of the whole body of manufacturers in my division, as I have gathered it from all quarters as best I could, I think I may say that, in as short a space of time, nay, even in a shorter, than it took to reconcile the textile manufacturers to a restriction at all, the industries now introduced to it for the first time will be thankful that at last the master's right in his servant's time and the servant's right in his own time has been legally recognized and settled. All the interests concerned in the energic force of the people, in the relation between masters and servants, in the stand-point from which each shall hereafter look upon their own and each others' welfare, all the successes consequent on an educated people, and not upon accident or chance, the supremacy of competitive progress in the great interchanges of nations, if the real tendency of all thought is towards peace, are more or less dependent on this one axiom.

Nor need we be any longer afraid of foreign competition, nor of the advantages which our continental neighbours are said to possess over us in their unlimited power to work all hours, with children of all ages, in their manufactories. Factory Acts are being deliberated upon in France for example, by the manufacturers, in association with scientific help, with the experience of the past five and thirty years in England and their own before them. On many points, especially educational and moral, they take a far wider view of the duties and responsibilities of employers than we do, and shrink not from demanding their ratification. An examination of the topics of discussion by the Société de protection des apprentis et des enfants des manufactures en Paris in May 1868 affords ample evidence of the earnestness with which the consideration of this great question is undertaken.

The questions presented were as follows:—

1. Limitation of the law.

Age of children; hours of work; night work; rest on Sundays and holidays; primary instruction and religious teaching; hygiene of the workshops; dangers, &c.; police of the workshops; inspection; penalties and relapses; casual measures, such as compensations, exceptions, half-time factory schools, cantines, guarantees to be given to the families, to the children, to the skilled workers for the execution of reciprocal engagements; work in mines; work of women.

In the legislation already effected by our own country, and in such considerations as these, deliberated upon by this

society preparatory to legislation in France, we have at least a time foreshadowed, when labour and education will be universally combined: when the hours of the workers will be everywhere more uniform; and when mind shall be fully recognized as the true source of the common weal of all countries.

I propose, Sir, now, to deal with the question of relaxations, after the 31st of March 1869, to which period nearly all those are limited, that have been sanctioned in my division; and to give you the reasons for and against their discontinuance after that period; that is, as far as possible, and consistently with the abstract interests of trade, to bring all associated labour within the same working hours; and as the requests by the letter-press printers have been the most numerous, their desires the most various, and their expressions the most urgent, I will commence with them.

Letter-Press Printers.

The total number of printers, and printers and bookbinders, known to the law, at present in my division in England and Wales and in Ireland, is as follows:—

	Firms.	Power employed.		Persons employed.								
				Adults.		Young Persons.		Children.		Total.		Grand Total.
		Steam.	Water.	M.	F.	M.	F.	M.	F.	M.	F.	M. & F.
England and Wales:												
Printers	840	1,090	5	4,055	247	2,171	228	312	36	6,538	511	7,049
Printers and Bookbinders	301	201	12	1,706	357	819	356	116	40	2,641	753	3,394
Total	1,141	1,291	17	5,761	604	2,990	584	428	76	9,179	1,264	10,443
Ireland:—												
Printers	150	191	18	1,411	157	780	73	26	1	2,217	231	2,448
Printers and Bookbinders	25	77	—	597	282	347	159	22	26	966	467	1,433
Total	175	268	18	2,008	439	1,127	232	48	27	3,183	698	3,881
Bookbinders in—												
England	108	1	—	318	171	181	116	20	27	519	314	833
Ireland	16	—	—	68	60	48	44	2	1	118	105	223
Total	124	1	—	386	231	229	160	22	28	637	419	1,056
	175	268	18	2,008	439	1,127	232	48	27	3,183	698	3,881
	1,141	1,291	17	5,761	604	2,990	584	428	76	9,179	1,264	10,443
Grand Total	1,440	1,560	35	8,155	1,274	4,346	976	498	131	12,999	2,381	15,380

In the fifth report of the Children's Employment Commissioners, 1862, page v., may be found the following expression of their opinion on this trade.

"(5.) The facts of the case of the printers are very simple and undisputed, and show the strongest ground for interference.

"The principal features are the following:

"1st. The considerable numbers that would come within the regulations of the Factory Acts Extension Act.

"2nd. The ordinarily overcrowded, ill-ventilated, dirty, and unhealthy state of the composing rooms, reading closets, and machine rooms, which make up together what is designated a printing office.

"3rd. The excessive amount of overtime and night work, even for boys of between 10 and 13 years of age."

Such were the reasons, supported by evidence, for legislative interference.

The objections to it by the employers are stated to be, that,

"1st. Over-hours and night work are caused almost entirely by circumstances over which they have no control. That editors and writers for magazines, railway officials, solicitors, &c., are the persons responsible for it, because the first two won't write articles till the last moment, and the third, withhold their instructions until the evening before the day on which the printed matter is wanted; the fourth, send matter at 7 p.m. to be printed for use by 9 a.m. the next day."

The Commissioners, however, rightly place the burden of this question on the proper shoulders. They say, "But who ought to pay for this extra strain? Those who impose it, or the boys of 11, 12, and 13 years of age, whose health and strength are undermined by it?"

What I have to report upon the whole question, and especially on the Commissioners' first proposition is that, the case of the "printers," so far from being simple and undisputed, is one of the utmost difficulty: and, though showing "strong grounds for interference," the application of that interference has presented phases of the most chequered character, and required the utmost consideration.

In the first place, the trade of a printer is not uniform but variform. There is the newspaper printer, daily, semi-weekly, or weekly; the general printer, and the jobbing printer, each singly, or with perhaps a combination of all the three; afterwards, the printer and bookbinder, the lithographic printer, copper-plate printer, and a printer of the largest class, and yet none of all these. Then, there is

the Sunday printer with errand boys running all day and all night to meet expresses; printing shops per se with their offices in back parlours, or, on premises with "no road" but through the dwelling houses; on premises subject to the hours of work and regulations of those premises, and they not under the Factory Act; in connexion with other trades and occupations, apprenticeships and trade rules, and other exceptional considerations of various kinds; all these equally loudly demanding a consideration, with which I am very sorry to trouble you, but am compelled to do so, in order to arrive at a correct decision as to what is to be done with them all on the 31st of March 1869, when their present permissive orders for relaxations cease and determine.

From the printing trade I have received more requests for further relaxations of the law than those which the law defines except by permission of the Secretary of State, than from all the other trades put together. Out of 1,316 firms in the trade, about 129 applications have been made to me for relaxations, and those so various that it seems next to impossible to devise a common relaxation which would be acceptable to all.

An analysis of these requests shows that—

For printing, proper, there have been 121 applications for relaxations as follows:—

Desirous of working from 8 to 8	53
8 to 8, with variable holidays	13
8.30 to 6.30	1
8 to 7 p.m.	8
8 to 7, with variable holidays	4
8 to 7.30	1
7 to 7	30
7 to 7, with variable holidays	4
7 to 6.30	1
Variable holidays only	5
Half holidays on Wednesdays	1
	121

Printing and bookbinding:—

8 to 8	2
8.30 to 7.30	1
8 to 7	1
7 to 7	3
Variable holidays	1
	8
Total	129

If we take this analysis as proof that, from six to six in summer, and from seven to seven in winter, the hours of the Factory Act, either best suit the trade as a whole, or that, it is so indifferent to any departure from them, that what are the hours is a matter of no consequence, then, the question appears to be settled on its own merits, since more than $\frac{9}{10}$ths of the trade approve of six to six tacitly, if not openly.

And it must be remarked, too, that these applications have been solely from employers; (I shall bring under your notice presently, one or two replies from the workpeople), and that their very variety, is indicative of personal circumstances requiring relief, rather than those that are general.

Let us glance at a few of them for a moment.

No. 1. Desirous of working from eight to eight, and till 10 on Fridays.

No. 2. Earlier hours than 8 a.m. very unpleasant.

No. 3. Printing-office never opened till eight.

No. 4. Premises are in a yard, which cannot be entered before 8 a.m.

No. 5. The most convenient for the men and boys and their families.

No. 6. Because it has been the custom for 20 years.

No. 7. Could work the whole Act well enough if the married women could be employed all night once a month and the regular hands with them.

The diurnal newspaper printer is very nearly, if not altogether, independent of the law, when his errand boys are exempted from it. His machinery and appliances are so perfect that, little boys are seldom required by him. To do what they have hitherto done, boys of 16 can well be substituted. The condition of apprenticeships is one of some hardship, which I shall by-and-by refer to. There have been no applications for relaxations, that I am aware of, for any daily paper of importance. The "necessities" of the times are fast eradicating insufficient premises; and invention has done and is doing its work, to meet them in other forms more expeditions and controllable, than the past exhibits.

The biweekly or weekly papers have suffered most in the changes which the Factory Act has imposed. In inhibiting an hour or two a week's longer work on one particular night or morning, (the night going to press, for example, or in the distribution of the paper the next day,) or from other causes, many hardships to small capitalists, and to limited roomists, (to coin a word for the occasion,) have certainly arisen; and the means by which they have been attempted to be met

have been most ingenious, and often crucial in small towns, or where other hands have been difficult to obtain, either permanently or for the nonce. I shall be excused describing these means, since I have no desire, and it would be also impolitic, to offer examples which might only lead to complications. In process of time these hardships will, I have no doubt, disappear.

The general printer is distinguished from the jobbing printer (and I shall be excused, I hope, by the trade, attempting the definition,) by the circumstance that he does not print newspapers. Every other kind of work within his typographical means and the hands he can set on, are within his province.

The general and job printer describes the effect of the Act upon his trade as follows:

"The more I see of the working of this Act, the more I feel convinced of the utter impossibility of carrying on the uncertain business of a job printer under such regulations. It would be as reasonable to lay down a law that a medical man's patients should not be ill at unreasonable hours, as to lay down hard and fast rules for the working hours of a job printer, and to insist upon their being reduced to an equal number of hours for each day. In factories, where goods are manufactured for sale, overtime means continuous overtime for weeks together, in order to strain the powers of production beyond what the factory is fairly capable of,* but in job printing-offices overtime is spasmodic, occurring occasionally for a few hours at a time to meet sudden emergencies, and such overtime is not injurious to health, but it is an abstract necessity to meet the requirements of such a business. I wish those who penned this law, and all who are engaged carrying it out, could have passed the last three days in July in my printing-office, and have seen the pressure that was put upon us by our best customers.

"In the first place, we were engaged in printing the list of persons entitled to vote for members for the borough; a heavy job, consisting of 24 large folio pages closely printed. In addition to that, are two large broadside sheets, also closely printed, of the county voters. These have to be done by 31st of July The effect of being a day too late would be to disfranchise all the electors, and subject the person in fault to a penalty of 500*l.* Secondly, on the evening of the 28th we received orders for 9,000 copies of the list No. 1 to be delivered to our customer on the following day. Messrs. ——— spend about 300*l.* a year with us, and we cannot afford to refuse their orders, and drive them away to other printers. Thirdly, on the 29th, at 1 p.m., we received orders for the list No. 2, the printing and folding and stitching of which had to be completed the same afternoon, then to be put in press, and at 8 a.m. of the 30th to cut the edges and despatch them. I entreated for more time, but it could not be granted, so I and the

* This is a mistake; overtime is not permitted in factories at all.—*R. B.*

members of my own family had to work until 2 o'clock in the morning over this job. Our account against these tradesmen amounts to 500*l.* a year. We must accommodate them; we cannot refuse their orders. No. 3 is a specimen of a local magazine which we print for several parishes; not all from one form, but separate matter for each parish. All of these magazines have to be issued punctually by the 1st day of each month, and we have only a few days allowed for their publication, as some of them contain local news of the previous month, almost up to the day of publication. These magazines, if we do at all, we must do always. We cannot undertake to publish them one month, and refuse them another. All this pressing work happened to fall together, just during the last few days of the month, and of course this is in addition to all the miscellaneous work from various customers which necessarily flows from day to day into the hands of the printer, some of which can be delayed for a day or two, and others requiring immediate attention. We cannot obtain extra hands when we require them in country towns. How is it possible, therefore, to meet extraordinary pressure, except by working occasionally overtime? Last week we could gladly have employed five or six more men if we could get them. This week we have so little to do that we could give half our people a holiday for the whole week, and should be glad to do so if they would take it.

"I know it has been argued that the Act does not limit the hours of men; but men and boys work together, and their labour so dovetails into each other that, if the boys have to be withdrawn in times of most severe pressure it grievously adds to the labour of the men.

"Before this Act came into operation, it very rarely happened that overtime extended later than ten at night in our office; but since that time, as the men have to do the boys' work as well as their own, it has sometimes been as late as twelve. Here again is the objection to commencing at six in the morning. If overtime is needed at all, it is always to get work out on the same day; it is never wanted in the morning; and men who begin work at six are totally unfit for late work at night. I send herewith a copy of the Printers' Register, which contains a well-written article on this subject. If you have not already seen it, I will ask you to do me the honour to peruse it. The early hour on Saturday has several times put us sadly about; it is our market day, and often proves to be a day of more than usual pressure. On the Saturday before Whit Monday we had to get out very heavy jobs at a few hours' notice, for Whit Monday business, and that happened to fall just at the end of the month, when we were pressed with our magazines. Last Saturday our men were employed to work until ten; they might have left two or three hours earlier if the boys had not been taken off so early."

I have given this letter in extenso, because it appears to embrace all the interferences by the Factory Act Extension Act, 1867, with the labour and comforts of the general and job printers. I will add, however, the "well-written article" of which this gentleman speaks, in order that

nothing may be omitted tending to elucidate the above question.

"Job Printers and the Factory Acts.

"*To the Editor of the Printers' Register.*

"The application of the Factory Acts to job printing establishments affords another illustration of the old truth, that 'what is one man's meat may be another man's poison.' In great cotton and woollen and metal and earthenware factories, where orders are received which give employment by the month, and where, in the absence of orders, the 'hands' can be 'making for stock,' or, at the worst, reduced in number, these Acts are, no doubt, highly beneficial to the workpeople, without being inimical to the interest of the employer. But in their application to the job printing business this is not so. Here an entirely new set of circumstances has to be taken into consideration. The job printer is employed almost wholly upon orders which are soon worked out, and which are generally given under pressure as to time. With him the completion of an order is not a matter of weeks, or even days; it is a matter of hours, and sometimes of minutes. When he is out of orders, he cannot produce for stock; nor can he safely diminish the number of his hands; it is impossible for him to tell when or to what extent, work may come in, or how soon it may be wanted. In one sentence, the great factory employer can choose his own hours for doing his work, and regulate to a nicety his means of production to the production he requires; while the job printer must be wholly ruled by his customer as to time, and as to production must make up for hours of idleness by hours of extra work. To apply *one* set of rules to the regulation of labour in these *two* opposite sets of circumstances is, to say the least of it, a very inconsiderate piece of legislation. We shall shew that, without conferring any benefit whatever, it operates injuriously upon the interests both of employer and employed.

"What is the purpose of the Factory Acts? It is to prevent the injury often done to the health of workpeople, and especially of young workpeople, by too much work. To that end the Acts forbid overtime, and fix the hours of labour in such manner as to put a stop to night-work where night-work is not absolutely necessary. Now, in large factories, where overtime has been made the rule rather than the exception, and has extended far into the night to rob the weary employé of his legitimate rest, these provisions are no doubt of prime importance. But what need is there for them in the job printing business? Here overtime is a casual occurrence, seldom extending over more than a couple of days in succession, and even then compensated for either by a precedent or succeeding spell of slackness of work, and consequent rest. Clearly there is no pretence for classing *this* among unhealthy employments, requiring an Act of Parliament to regulate it. The measure conferring no benefit, then, let us, in the next place, see what harm it does. The hours of

labour, as fixed by the Act, are to be from six a.m. to six p.m. on the first five working days of the week, and from six a.m. to two p.m. on Saturday. These hours were no doubt adopted because they were not uncommon in factories; but they are almost unknown as working hours in country job-offices. The traditions of the trade, the habits both of workmen and employer, the requirements of the customer even, would have to be revolutionized to make them fit into this new order of things.

"The business of a country job printer is usually connected with the retail trade of a stationer. He divides his attention between superintendence of the printing-office and the shop. Now, his business hours, in his shop, are usually from eight a.m. to eight p.m. He can get no custom before eight in the morning; he catches custom while business men are taking their evening walks, between six and eight in the evening. The requirements of his shop regulate his hours in the printing-office; he works *there* from eight to eight. To compel him to change those hours to the regulation "six to six" would be to impose upon him an additional two hours of labour every working day of his life; for the extra time given to the printing-office in the morning could not be subtracted from the time devoted to the shop at night, without serious pecuniary loss. Nor is this the worst evil of the new regulation. Not content with compelling the employer to work fourteen hours a day, in order that the employé may be put to the inconvenience of getting up two hours earlier than is his wont, the Act requires that the extra two hours thus virtually given by master and man shall be the least profitable two hours in the whole day. As a rule, a country job printer's orders come in after eight o'clock in the morning, and are sent out by post in the evening. Nine times out of ten, therefore, printers coming to work at six in the morning would have absolutely nothing to do till eight; while printers closing their day's work at six in the evening would leave orders unfinished, which it might be of vital importance should be completed. And here arises another injustice, which inflicts upon the job printer positive loss—loss of money and loss of trade. Newspaper printers are allowed to work from eight to eight. So that if an order from a good customer reach the job printer at five or six p.m., to be sent off by that night's post, *he* cannot execute it, but his competitor in the newspaper trade can; a piece of legislative partiality which could never have been adopted if the facts had been properly made known before the Act was passed. As to the Saturday half-holiday, it is well known that in many country towns the hours between noon and eight in the evening on Saturday are the most important of the whole week, both to the public and to the printer.

"Thus far we have been looking at the matter from the employer's point of view. Let us take a brief glance at the manner in which the employé is concerned in it. Printers are told that the Act does not regulate the hours of the men; and this is true. But in regulating the hours of the boys it very seriously *affects* those of the men. If boys are to be employed at all they must work

with the men; they cannot work from six to six while the men work from eight to eight. If, again, the boys are to have the Saturday half-holiday, the men must have the Saturday half-holiday too, whereby they will often lose the most profitable hours of their week's work, without any corresponding increase of employment on what are at present looked upon as slack days. And all this leads up to one very serious consideration. Our belief is that the obstruction and annoyance to which masters will be subjected in the management of their business under this Act will be so great that they will many of them decline to take apprentices altogether. They will do, as many of the great newspaper proprietors have done already, employ young men of eighteen to do the unskilled work of their offices. At that age it is too late in life to learn the business, and many a poor lad, who but for this Act would have acquired a trade by which he could earn a respectable and honest livelihood, will be condemned to pass his life in the capacity of a common labourer.

"We trust we have shown in these few brief remarks, which might be easily extended, that the application of the Factory Acts to the job printing trade would be injurious both to employer and employed; as unjust to both as it is unnecessary to either. The question is how to remedy the matter. The Secretary of State has special power given him in the Act to modify any of its regulations, if it be shown that they are inimical to the interests of the persons employed in the trade to which they are applied; but, in the case of the job printers, there appears to be a strong disposition to refuse any such modification. We cannot but think, however, that this disposition must be dependent on some misapprehension as to the facts, and that being so we feel that the best course for the job printers to adopt would be to draw up a memorial to the Home Office, clearly setting forth their case, and asking for a speedy redress of their grievances. Should that fail, as we do not believe it would, we must then see what else can be done."

Such then are the sentiments evidently of the masters, from their own point of view, and the position of the men also, from the masters' point of view. In the meantime I add an extract from the very next article in the same Printers' magazine, which may serve in some measure to illustrate the other side of the question.

"Typos at Ease, by a Metropolitan Explorer.

"It may have been your lot, as it has been mine, to see a company of typographers, for brevity called 'typos,' hard at work in the composition of a morning newspaper. It is an edifying sight; forty or fifty men standing at as many 'cases' of type, their right hands and fingers moving from one small compartment to another and thence to the 'sticks,' as they call the little metal frames they hold in their left hands, with a separate journey for each letter or stop or space in the portions of columns they are setting. Hot, close work it is, generally. The

gas blazes full in their faces; they are not often furnished with quarters in which there is too much ventilation; and, with shaded eyes and bare arms, they may give you a fair notion of one portion of the mechanical labour that must be performed before you can get your ordinary pennyworth of news at breakfast time. I have known enthusiastic ignoramuses envy the lot of the typo, and speak of it as if he who set type must be perpetually receiving supplies of rare and enchanting and soul-elevating information. But when I have visited such an elysium as a composing room, and seen how each compositor is doomed to go through a mental life of fragmentary confusion,—how, so soon as he has spelt through a fiery passage in the eloquent peroration of a parliamentary orator, he is doomed to take up a disjointed portion of a police report, to exchange that presently for a paragraph of a money article, or a letter on crops, without either beginning or end of which he can make reason, and that again for twenty or thirty tantalising lines of classical illustration in a leading article upon some topic to which he has no clue,—and when I have reflected that this process goes on night after night for years, from the dawn to the sunset of life, it has seemed to me rather that only some special interposition of nature saves these workmen from making more than an average contribution to the population of Bedlam or Colney Hatch."

In November 1867 the proprietor of a daily paper, with a very large circulation, in Ireland, issued a circular to the proprietors of other daily papers in the United Kingdom, touching upon the various points in the Factory Acts Extension Act, from which he was most apprehentive of mischief to his establishment. He said—

(1.) "The application of the provisions of the Factories Act which have regard to the employment of boys and young persons after six p.m. would be a grievance to newspaper proprietors and newspaper employés so great as hardly to be endurable. To apply to the case of daily newspapers regulations which would debar boys from working at night unless on alternate nights or alternate weeks would be simply to stop the employment of apprentices altogether in daily newspaper offices, and at the same time check the supply of men for the trade; the boys would thereby be prevented from earning sufficient money to support them, as they do at present; and as it requires seven years' apprenticeship to obtain a thorough knowledge of newspaper work, compositors' work particularly, the restriction to alternate weeks would necessitate a service of fourteen years as apprentice. (2.) It is impossible for newspaper proprietors to carry on the work of a daily paper without a certain number of boys, from fourteen to sixteen and upwards, as readers, feeders at machine, folders, proof-pullers, errand boys, messengers to the different sections of the literary department, and all the minor duties discharged by the so-called 'Printer's Devils.' This is work, or rather occupation, wholly unsuitable to adults. (3.) At present there is no hardship whatever in the case of young persons

working on daily newspapers at night, as they do not work at all during the day. They do not (I quote my own case) come to work till six p.m., and, taking an hour for evening meal at eight or nine, they are clear of the concern at four a.m. ; thus working only eight and a half to nine hours, and being completely free from four a.m. on Saturday till seven p.m. on Sunday."

The Dublin master printers were a little more diffuse, and offered other reasons for altering the Act, and assimilating the hours of work more to those of the Workshops Act. They do not desire to be limited to six and six or even seven and seven or eight and eight, but they propose to work 60 hours a week between six a.m. and eight p.m., and to work young persons, and females, overtime, on not more than 30 days in a year, nor more than three days in a week.

"The Act compels us," say they, "(unless in cases where especial permission has been obtained) to work from six to six, giving $1\frac{1}{2}$ hour for meals ; and on Saturday from six to two, with half an hour for breakfast. To this arrangement many of us have to object, that it breaks up the day, and causes loss of time much more than the arrangement so much adhered to hitherto, of seven to seven, with two hours for meals, or eight to seven, with one hour for dinner ; that it does not give hands proper time to take their meals. On an average hands do not work less than a quarter of an hour from their homes. This leaves only a quarter of an hour for rest, and taking either breakfast or dinner ; an arrangement that cannot tend to health and comfort. The system of taking meals at the factory or an eating house is one that does not at all accord with the social habits of our people, who have always been wont to take meals with their families. We fear the result will be to tend to break up the family feeling we would wish to foster, and that hasty and utterly insufficient meals would be taken. The very early hour of commencing work, and this short meal space, will tend to make the people crowd more and more together into the town, and it will quite counteract the tendency that has been increasing of late years of residing more in the outskirts and suburbs.

"We believe that every purpose of the Act would be attained, and much complication avoided, by simply enacting that no young person or female should ordinarily work more than sixty hours a-week, between 6 a.m. and 8 p.m. on five days in the week, and 6 a.m. and 4 p.m. on Saturdays ; no interval greater than five and a half hours between a meal. This would leave each employer at liberty to select the hours that would best suit the requirements of his trade. The hours selected should be specified on a notice posted at the entrance of each place of business.

"According to the provisions of the Act the employment of young persons and females in overtime is forbidden, unless with a corresponding diminution of work afterwards. Bearing in mind that the employments chiefly carried on in Dublin are not

of a particularly laborious character, and that the Act will enforce due regulations as to the healthfulness of workshops, we would request permission to work young persons and females one quarter day overtime on not more than thirty days in the year, and no more than three in any one week."

I will only add, on the part of the master printers, the testimony of another job printer, who would, I am sure, desire to be heard on the whole question. He says—

"I think I explained to you, when I had the pleasure of seeing you some fortnight ago, the extreme inconvenience of our commencing work in the printing office at six a.m., owing to the necessity of the men and boys passing through the shop to the office, and thus exposing our goods."

And I will conclude the masters' side of the question with an extract from a report made to me by Mr. Sub-Inspector Buller, who, writing from Frome on the 18th of August last, observes—

"As to working from six to six, I asked Messrs. ——— how it was that they were able to do so, when so many other printers were applying for relaxations from seven to seven or eight to eight? There were one or two reasons. In the first place, they are printers and binders; and have no shop. The shops could not be opened at six o'clock, and as a Bath printer remarked to me this week, 'people would consider us cracked if we opened our shop then,' and the shops must be kept open after six p.m. In the second place, Messrs. ——— are so large a firm, and have so entirely the command of the market here, that they can do just as they like as regards the hours of labour. Whereas in other places the printers would probably themselves object to coming at six. In the third place, living, as they do, in a manufacturing town, where everything is astir at six a.m., they find no difficulty in getting their hands in at six. 'The hands,' he said, 'did 'not like coming at first at six, but now that they have got into 'the way of getting up early, they prefer it, at least during the 'summer.' In the winter he thinks they will have to make a change. They have fully carried out the Act; but he says that it costs them about 150*l.* a year, by having to put on men at the printing machines after six p.m., instead of boys; and he again suggested to me, what I wrote to you some time ago, viz., that if they could have the same privilege of employing boys in printing 14 hours a day as they now have of employing women in bookbinding they should be able to work the Act without inconvenience to themselves. It would be only in the third week of each month, when they are busy in the magazine printing, that they would want so to employ the boys, and it need not hurt boys so to employ them, if it does not hurt girls of 14 and women."—"The foreman of a printing office told me this week, many of the printers of the country are dispensing altogether with young hands; and he seemed to think that it would produce a great

alteration by-and-by in the rate of wages. 'Hitherto,' he said, 'a man may have been accustomed to have four or five boys 'under him, who, as they grew up, would start as printers on 'their own account. But if the crop of young printers is 'largely reduced, which at present seems to be the case, of course 'men will be more sought after, who must be paid higher.'"

There may be something, in fact a good deal, in the remarks made by this foreman, since it is certain that, by the Factory Act, the apprentice system, by which the increase of printers has been curtailed, has been materially affected. The trade rule is that, no boy shall be brought up to the printing business except under an indenture of seven years; and the hours of work grafted into and permitted by the indentures are 56, 55, 54, and 50 per week, according to the kind of offices in which the workers are employed. Moreover, in some daily-paper offices, there is no day printing done; and the apprentices have been bound with the understanding that they would have to be employed always in the night and on Sundays, both of which services are forbidden by the Factory Act, which overrides the indenture, and thus places both master and apprentice, so far as the indenture is concerned, in opposition to each other. It appears, therefore, not unlikely, that if the covenants between them are not amended, and if the existing rule of limiting the number of apprentices to three in a "fair office" be not reconsidered, in the course of time men must be more sought after and be paid higher; or, what is still more likely, the many schemes for setting and distributing types by machinery will have superseded the employment by hand, except in those small offices scattered over the country which pretend to nothing more than the execution of "jobs" of the most insignificant character.

I now propose to consider the question of the workers, and to adduce what evidence I have been able to collect in answer to the masters' representations. And first, we find in the evidence collected by the Children's Employment Commissioners abundant proof of the bad effects of overtime and ill-ventilated workshops on the physique of the employés engaged in the printing trade. Mr. Marples of Liverpool states that "they made nearly 80 hours a week before he had "the second machine." Mr. Vernon, "that machine printers do not live on the average beyond 30." Mr. M'Corquadale, of Newton, "We have had to work on Sundays, but that "has rarely been the case. In the instance now in my mind, "it arose solely from the procrastination of a railway official. "It is not improbable that other cases of extreme overtime

" are attributable to similar causes, and might therefore be to " some extent obviated."

As I have given an extract or two from the Printers' Register on the side of the employers, &c., I now present one from the same source on the side of the workers, which is certainly confirmatory of much of the general evidence in the Commissioners' Reports.

"To the Editor of the 'Printers' Register.'

" Sir,—As the foreman of a newspaper and jobbing office in this country, and as having been employed in several large offices in London, allow me to say a few words respecting this matter.

" Of course you have had letters for and against this subject; the 'for' by the master printer, and the 'against' by the job printer.

" But as we wish to arrive at a proper conclusion, let us endeavour to see what is generally the rule in the trade, and not act upon what any one particular office might do.

" Ever since I have been in the printing profession (about 16 years), I have always been under the impression that youths, aye, and journeymen, in printing offices, are, as a rule, a hard-worked, and by far too hard-worked, body of individuals.

" But as the boys only are the main objects of discussion, I will confine myself to this point.

" I have seen boys kept at work at all hours of the night, both in town and country, certainly not so much here as elsewhere, having endeavoured, as I shall still endeavour, to put down this boy drudgery.

" Fancy lads of tender years, from nine or 10, to 13 or 14, possibly, going to work at six and seven in the morning, and not 'knocking off' before seven, eight, nine, 10, or 12 at night, and sometimes not then, as they are kept working all night; and, in London, oftentimes boys have a mile or two to walk after the work is done. Is not this a stigma on us men of letters?

" The opinion of your correspondent 'H.T.' may be plain and staightforward, but it is one to which we can give but little heed, as he telis us that his is only a small office, and that well ventilated; in fact, he said it was better than the generality of offices he had seen. This being so, how can we accept him as judge? I cannot for one. Good ventilation is essentially necessary. Let 'H. T.' walk the printing offices of London and the large towns, and he will see that what he says is not worth so much as he imagines.

" My experience is not obtained from one, nor two, nor three offices only, therefore I consider myself able to give an opinion.

" I know a newspaper office where there are 12 apprentices out of 16 hands, and these poor 'imps' have to work from 70 to 80 hours per week, and that on piece-work! And, more than that, I have seen the place in which they work—*slave*, I should say. It is a small room, about the ordinary size of a kitchen in a working man's dwelling, and the roof is very low!

"'H. T.,' again, may not be called upon to make overtime, but, there are thousands of offices, I might almost venture to assert where a great deal of overtime is made. It is a noted characteristic in our trade. Certainly, oftentimes there is need of it; but, generally speaking, I believe it is because people requiring printing done are neglectful, and demand that their orders shall be executed in an unreasonably short space of time. I hope this Factory Act business will be the means of teaching them a lesson.

"With regard to the inconvenience the Act entails, at times, this is not to be denied, but of course it will wear off a great deal after a while. I am firmly of opinion that our profession much needs the interference of the Act, and as my knowledge of the trade has brought about this opinion I shall give the Act the support which I consider it deserves.

"The remarks of 'A Compositor,' as far as my experience goes, are very near the mark; he is candid, unprejudiced, and truthful. I say this because I can confirm his statements. I do not take this view of things simply for the promotion of my own ends, but from a sense of justice.

"Surely, as reasonable men, we should not only see to the interests of ourselves, but study the well-being of others, both those with whom we work and those for whom we work, and others with whom we have to deal and mix. This is our bounden duty.

"I do not wish to injure the masters, and I shall do all in my power to promote the welfare of my own employers; but to encourage them in employing an unnecessary number of boys, and overworking them, is a thing I hope I shall never accede to. I am happy to say I do not believe they desire such a miserable state of things.

"Wishing to see all parties interested, employers and employed, pecuniarily or otherwise, having their rights,

I am, dear Sir, yours faithfully,

J. Newland.

"*Shropshire, July*, 1868.

"[While desiring that this subject may be fully and fairly discussed, consideration of space compels us to limit the controversy to its legitimate issues. The question is *not* (as Mr. Newland seems to think, shall job printers accept the Factory Acts as they are, or try to get rid of them? It is this:—Being compelled to come under the Factory Acts, and to work their boys for only a given number of hours per day, do job printers think the regulation 'six to six' likely to prove inconvenient to them; and, if so, are they agreed to endeavour to change (not to *lengthen*) these hours for some others, say eight to eight.—Ed. *Printers' Register*.]"

And here I would interpolate a remark on the note of the Editor of the "Register." The question really is, as he rightly observes, not whether the printers shall try to get rid of the Factory Acts, for that I believe they cannot

do, but are they agreed, if from six to six is likely to prove inconvenient to them, to change (not to lengthen) these hours for some others? This I consider the proper issue to be considered, and it is that to which the purport of these various extracts tends.

The following questions were put by me in March 1868, and answered by one of the most intelligent journeymen printers whom I have happened to meet with, though, as a class, they are mostly of a very superior character.

"*Q.* What distinction as to hours of work should be made between ordinary printers and printers of newspapers, and for what reason should any be made?—*A.* The necessity for giving the latest information in newspapers is so great that it is impossible to publish a daily morning paper with success unless this is done, and it is impracticable to do it without night work. The hours of night work should be at least two hours less than the hours of day work; for the strain on the system is much greater, by reason of the atmosphere being heated and rendered additionally impure by gas. To those engaged in the work this closeness is not at the time offensive. Indeed they are very particular in keeping the windows shut and all crevices stopped. I have entered a newspaper office at night when the men were working, and the rush of impure heated air towards the door was so great as to make one gasp for breath. Statistics prove that night hands enjoy a shorter space of life than day hands. The working of a newspaper is as follows:—The advertisements, to a very great extent, are set up in the daytime. A greater portion of the type used in the preceding paper is distributed in the daytime, and the later editions printed and set between the hours of 6 a.m. and 3 p.m. In no case should a young man under 21 years of age be permitted to work night work. At the best his trade is far from healthy. Night work, in nine cases out of ten, will be to him the foundation of ill health. You will perceive from the foregoing there is no lack of opportunity to young persons, even in newspaper work, to learn their business in the daytime, as they may be employed in the later editions, the distribution of type, and the setting of advertisements.

Q. By the law as it stands, letter-press printers may employ youths above 16 years of age as men, for 30 months?—*A.* To this regulation I see no objection. It is only reasonable, in a revolution of this kind, that it should be as gradual as the interests of those concerned will admit.

Q. They may employ boys between 13 and 16 on alternate nights, provided they are not employed on the day preceding or succeeding such night work?—*A.* This I think sufficiently

stringent to prevent the employment of such boys, for which employment I know no necessity. Newspapers can be and are now, for the most part, solely produced by journeymen's night work, at a profit.

Q. They may also, by an order, employ young persons between 13 and 18 from eight to eight?—*A.* This I consider the objectionable clause of the Act. If the order were granted, the young persons would be in a worse position than before the Factory Acts Extension Act, 1867. The reasons for this opinion have been fully detailed in our memorial, which I may here state was signed by every adult in our establishment, so unanimous was the opinion of the baneful operation of such a provision. The leading features of the case are as follows: Taking our office as a fair sample, there are 24 boys employed, five of whom have no notion of reading or writing, ten more can read very imperfectly, and I may fairly say cannot write, and only three of the rest can be said to have a decent elementary education. Of the 28 girls employed I cannot speak so definitely; but their education is extremely imperfect. If it be once allowed that these young persons be employed up to eight p.m. they can have no chance of attending a night school. The beneficial operation of the Act is shown by the following facts:—Since its enforcement, five girls attend evening classes, and nine more have promised to do so. Two boys attend evening schools, and several more promise to do so. The Act has only been in force two weeks. The general trade hours have been from eight to seven, but it is only fair to state that our office has been exceptional. I anticipate a much greater attendance at the evening schools, when the hours from six a.m. to six p.m. come into operation. I have now replied to all the topics suggested in your letter. I may add that the alteration will be beneficial to the adults, as their hours will be assimilated necessarily to those of the young persons who work with them. And I am decidedly of opinion that the improvement could be effected without injury to the public, or loss of profit to the employers. I refrain from going into detail on the latter point, as I fear I have already troubled you with too long a letter."

I will conclude with two letters addressed to a gentleman belonging to the Birmingham branch of the Typographical Association, with leave for me to use their contents, expressive of the opinions of the working printers of that town on what hours would be the most suitable to fix upon for the interests of both masters and workers.

"With regard to the subject of your note, I may say that I believe the interests of the trade will be best served by fixing the hours of labour from six to six,"

"Dear Sir,

"I am requested to forward to you the following opinion of the companionship, in reference to the operation of the provisions of the Factory Acts Extension Act, 1867.

"I am requested at the same time to state that this opinion was eliminated after a rigid and critical examination of the bearings of the Act on the different trades whose position it proposes to ameliorate. Many members of the companionship have recently been made aware of the fact that some violations of the provisions of the Act had taken place in various parts of the empire; and that many overtures had been made to the Inspectors for a relaxation of the Act to suit the peculiar exigencies of certain trades. But whether these overtures preponderated from employers or employed, the gentlemen whom I represent, so far as their social or industrial position is involved in the operation of the Act, are fully prepared to endorse the wisdom of the legislature in passing a measure so comprehensive in its scope, so distinctive in its application, and so ameliorative in its character.

"Holding these opinions, they conceive that the Act will have a tendency to lessen boy labour, and thereby eventually to reduce the surplus labour in the market, to simplify the relative position of employer and employed, and to destroy many antagonistic elements between the two interests, and to amplify the means of education among the great bulk of the working class of this country.

"We therefore look upon the Act as a great boon to the rising generation of England, as affording them the blessing of light, freedom, and happiness, which we hope it will always be the tendency of modern legislation to succeed in accomplishing.

"As applied to the printing profession, we conceive that Parliament exercised a wise and humane pressure in compelling the principles of the Act to be applied to a business which when pursued at night is debilitating and enervating, even to constitutions of a robust character."

Such Sir, are, I believe, the detailed representations of both sides of the question as respects letter-press printers; and if those of the masters are more varied and lengthy than those of the men, we must remember that there is less freedom for the men to express themselves publicly on matters of trade interest than for the masters, since they are not independent of results which might be of a painfully privative character to themselves and families. But as carrying out the law, and as endeavouring to arrive at a just conclusion, whether after the 31st of next March the relaxations already allowed ought to be renewed or not to this particular trade, (for I have guarded against their longer continuance without the fullest opportunity of hearing both sides,) I venture now to give you my reasons why they should not be renewed, and why letter-press printers should conform to the Factory Act of 1850, namely, six to six in summer, and seven to seven in winter, if it be so desired.

Admitting fully all "the pushes of trade," and all the arguments of the general and job printer whose letter I first quoted, and which in fact, entered into every detail that could be supplied by others, I see no difficulty in any of them which cannot be readily overcome, if all printers are dealt with alike. Any exemption from this rule in favour of the newspaper press, for example, or any press, would institute an unfair advantage over the others. Pushed work would be executed by the favoured press to the manifest injury and injustice of the smaller capitalist. The public certainty, that all printers were limited alike, and that none could work overtime, would render it imperative on all applications for printed work to be made with due regard to the contingent probabilities of its non-execution. The question of "pushed work" is ably solved, I think, at No. 154, Mr. Lord's Report, Children's Employment Commissioners, p. 38, where it is stated—

"The difficulty of avoiding the extra hours in most printing offices is simply a matter of expense, which would ultimately fall upon the party for whom the work is done. If excessive competition in the printing business did not exist, this obstruction could not be urged. It could be met, however, thus :— as only a portion of the machines are making ready at one time, whilst the others are printing off, an arrangement could be made to permit some of the boys to be at home resting, whilst other boys are at work printing off. The gist of the argument however, is in the following :—Authors are not easily managed, it is necessary that the work be delayed till the last hour ; and as publication arrangements demand the issue of the work at a certain time, thence boys must work extra hours to accomplish this. The remedy for this is very much in the hands of the publishers, who can prescribe the time when contributors must supply their copy, that time being calculated so as to give the printer reasonable time to print, without the necessity of resorting to extra hours to produce. Some magazines are produced without resorting to extra hours, and if some why not all ? Or, again, the magazine rush occupies only a few days in each month, and supposing that the printer cannot overcome the author difficulty, it would be an easy matter so to arrange the boys that the machines employed upon the magazine work could be kept working by relays of boys, so as not to work any set of boys particularly, at that time.

"The real difficulty is that both men and boys like the extra time, as it increases their wages, and many difficulties are raised by them which are not real. Employers also are not yet as a whole come to see that extra work and night work are not really profitable to them in any sense."

1st. I think, therefore, inasmuch as so small a portion only of all these firms have asked for relaxations, that the

majority ought not to be disturbed in their general arrangements, to satisfy the local or personal circumstances which affect the minority.

2nd. That as the law permits the hours to be varied in conformity with the wishes of a large proportion of the requisitionists in the winter months, there remains but small value in the argument for extended hours into the evening by the residue.

3rd. That all hope of night-school education must be abandoned by the young persons (many of them avowedly ignorant) unless the Factory hours be adhered to.

4th. That as young persons over 16 can be employed as men till 1870, and afterwards with a permissive order, there is really no necessity for any further relaxation; and that,

5th. As the expectations of the working printers to participate in the Factory Act Extension Act, 1867, had been raised to the highest pitch by its obtaining the sanction of Parliament, and have since been grievously disappointed by the relaxations permitted, and as ample time has now been afforded to the master printers to prepare for any change in their ordinary hours of work and in the ages of their employés so as to obviate any inconveniences arising therefrom had they treated the question seriously, I am of opinion that after the 31st of March next the law should have a fair trial, and that all other relaxations but those in the permanent exceptions of the law should be refused.

The Straw Bonnet Trade of Bedfordshire and Hertfordshire.

The bonnet trade of Bedfordshire and Hertfordshire, is one of a peculiar character. In considering it, it must for the purposes of the law be separated from the straw plait trade, the two classes of workers being widely different both in age and employment. The bonnet makers may be described in a few words. They are about half of them immigrants for the season trade from other counties, and half permanent residents. The former arrive in the Bedfordshire towns about November, and probably leave again in May, earlier or later according to the trade, and, for the same reason, in greater or lesser influxes; the latter are more or less at work all the year round. Their places of work are large, light, and well-ventilated rooms, rendered as comfortable as possible; far more comfortable indeed, in many instances, than the homes they have left or the lodgings they have taken: and of which they are unwilling to be dispossessed, by any

law, and particularly by that which associates them with factory workers, for whose position they have considerable contempt. The immigrants lodge in houses where there may be families, or not, as the case may be, often very much crowded together; a shelter, and nothing more: just tolerable for the months they have to stay, and the wages they can earn. To see them at work, they look most contented and happy. Beyond that, I have not felt it my duty to inquire into the effect of this crowding together, either in the lodgings or in the workrooms, or their moral or intellectual state. Incidentally I heard they made but poor wives, which I am rather inclined to believe, and was sorry for; since they are just a class, and the incidents of their position are exactly those, to which domestic training might be so well applied, if there was anybody in the neighbourhood that would condescend to become teachers.

You are aware, Sir, that in all such workrooms employment is to cease on Saturday afternoons at 4·30. Accordingly, I gave directions that, on a certain Saturday, work should cease at half-past four, and all these "young ladies" were for once compulsorily dealt with, and sent home. On arriving there, the lodging house keeper, offended in the highest degree with their unaccustomed intrusion on her Saturday afternoon and the duties she owed her family and children, rated them so soundly, huddled as they were upon each other's knees for want of room, that they could bear it no longer, and so they all went to bed at that hour, and were not seen again till late the next day, which was Sunday. This little anecdote gives in the fewest words but in the most illustrative manner the comparative discomfort of the lodgings, with the comfort of the workrooms; and a reason for these young women's dislike to legal interference.

If we look at their hours of work, they are extremely variable. Late sitters up and late risers are at their forms by 10 o'clock possibly. Those of earlier habits, and perhaps with coming discomforts foreshadowing themselves, are at work by eight or nine o'clock. They mostly seem to come and go as they please; and, working piece work, can accommodate themselves to either regular or variable hours.

The same causes which have operated ever in inducing late hours of work, present themselves in the detail of the straw bonnet trade. It is a season trade, and as perhaps nothing varies more than female head-gear, whatever is the fashion, must be taken when it is at the full. Nevertheless, there is a very large portion of the trade not so entirely dependent upon the moment, and in which there is pretty regular employment for a certain class of hands. I heard

many expressions of regret during my inquiries that the season of good employment was so ephemeral. "Gladly would they welcome the Factory Act or any Act that would prolong the receipt of high wages." I endeavoured to show them that earlier leaving off in the evening would inevitably prolong the season; but I found it hard to argue successfully against the "Get that get can" belief, as to the work itself: and a little harder perhaps, against "the idea of being designated factory girls, and reduced to their hours and level." Such is the opinion of these "young ladies" with respect to their northern countrywomen.

I have no reason to believe that the physical health of these bonnet makers suffers from those late hours. It is in fact as if they worked abroad and at home in the same day; under restriction, whilst on the employers' premises; at liberty afterwards to employ their own time as they please. But morally and socially I cannot help thinking them the foundation of evils which are the prelude to indomesticity of every form, and as such are mischievous to whatever society these workers may hereafter individually form a part of. It is just one of those cases in which the future of the social life of this class of workers, including also shopwomen, milliners, mantle-makers, &c., should be under the visitation and control of the middle and upper classes, who have the heart and the will to be thus useful; and who, in night schools for elementary education, and in teaching the useful essentials of a woman's life, might confer so great a blessing upon the homes and families of the working men, by a supervision which would cost them nothing but the visitation, and would be amply repaid by the fruits it would be certain to bear.

After the best consideration I can give to the condition of this class of workers, the relaxation of the Factory Acts in the winter months from seven to seven, appears to me sufficient for all the purposes of their trade. Seven to seven does not necessarily presume seven to seven, if eight to seven will be sufficient. Seven to six even in summer, when there is no season trade, including Saturday, with an hour and a half for dinner and tea, would give the employés 57 hours a week, quite as much as they would need.

It should be the business of the local authorities of such towns as Luton and Dunstable to provide ample lodging accommodation for the immigrant workers during the season trade by which they are so much benefited, without trenching upon their hours of leisure and rest, in which they might be so profitably employed in training both the head and heart for domestic life. The employers know how infinitely mis-

chievous are the opportunities which these late hours afford for vicious pursuits; and crowded lodging-houses often admit diseases of the most fatal character, which spread themselves over the inner as well as the outer circle of society, with the most fatal results.

But it is not alone for this necessity of night institutions where these bonnet makers, immigrant or resident, might be taught the art of reading, writing, and accounts, and of cutting out and making their own clothes, and also the simplest elements of culinary and domestic training, but for a far wider and more important object. The bonnet trade, like the ribbon trade of Coventry of a few years ago, is in a state of transition. There are no bonnets made nowadays, it may be almost said; no consumption of plait equal to what there was in the days of George the Third and Fourth, nor may there be again in all human probability for a generation or two, if then. But straw may be worn in a thousand fascinating shapes, and employment may be made for the plaiters by the enterprise and spirit of the manufacturers, if they will devote themselves to it. A certain trade there will always be, both home and foreign; but what appears to me to be desired for Luton and Dunstable is the cultivation and encouragement of art and design at home: not the waiting for it till it is designed by others. No matter what may be the cause of any depression in a trade, whether treaties which are not reciprocal, or rivalries which are more successful, they should not be beaten by either, but so excel as to be able to compete with both. If bonnets made entirely of straw are not fashionable, it is more than folly to endeavour to force them upon fair faces; but they may be made partly of straw and partly of other materials, so as to be graceful and attractive, and profitable. It is of no use repining over the past. It is the future to which the manufacturers must look. The trade may be and will be probably more changeable than it ever has been; but it also may, by the exercise of good taste, be far more substantial and sound than ever. Artistic excellence plays so prominent a part nowadays in everything pertaining to external adornment that, without it, it would be hoping against hope to suppose success possible. Let us take for example the head-gear of the present day, of silk, lace, ribbon, or of whatever it may be composed. Our grandmothers wore bonnets, our mothers, bonnets, our servant girls, bonnets. The grandmothers of the present day wear head-dresses, the mothers head-dresses, and the servant girls head-dresses, and for all these head-dresses the next substitute will in all probability be a mantilla, unless the Luton manufacturers can combine with those of Dunstable, to invent something in the

shape of a cottage bonnet, straw interwoven or coronetted with wild flowers, or trimmed with magical exotics which do not fade in the sun, but are like the wearer, always exquisite. Where everything depends upon fashion, it seems reasonable to suggest (if such a liberty may be taken by an Inspector of Factories) that the manufacturers of Luton and Dunstable should have an eye everywhere where information is likely to be gained, both at home and abroad; and a telegraphic cypher for instant communication, so that not a moment should be lost in making known any new fashion in which straw can be employed. And steps should be taken at home to establish schools of taste, and to cultivate it to the utmost limit—schools for women, schools for men, in which the time that ought to be leisure, now employed in the production of articles hard to dispose of, might be spent in incorporating new ideas into an old trade, until the old has no more place, having become altogether new.

One topic more I would beg to introduce into this question, in support of my view of the proper restriction for these trades, and it is the medical testimony to be found in the evidence in the Second Report of the Children's Employment Commissions, on the effects of late hours amongst all sorts of female employments, on the eye, where vision has to be concentrated on minute objects under artificial light:—

"After long work," says Mr. Lawson, p. 186, "the eye becomes fatigued, the strain is relaxed, and the image, being thrown slightly out of focus, appears indistinct. A continuance of work without resting the eyes, causes a complete relaxation of the effort to accommodate, and a complete loss of the object on which the eye is fixed."

And Dr. Letheby adds, p. 183:—

"A very slight acquaintance with the habits of the needlewoman, and the many circumstances which tend to impoverish her strength and sap her constitution, will be sufficient to show how urgent is the necessity for a large improvement of her social condition."

The position of large general shops under the Factory Act is greatly akin to those I have been describing, as also that of milliners and mantua makers. Numbers of persons are employed within the curtilage of the same premises, and in many cases their hours are late. It appears to me therefore that, in such places of business the hours of work from seven to seven all the year round would not be at all unreasonable, nor prejudicial either to master or worker.

The Salt Trade.

The salt manufactories in Cheshire and Worcestershire come under the Act as any other manufacturing process: and as early as the 28th of March I was favoured with the following letter from the Chamber of Commerce of Northwich:—

"1st. The trade are anxious to know whether bricklayers, carpenters, smiths, engine-fitters, bargemen, painters, rope-makers, plate-layers, engine-drivers afloat, and labourers employed by these craftsmen, all of whom are incidentally required to keep the large establishments of the salt works in repair, come under the Act, and must be counted when the establishment is brought under the operation of the Act?

"2nd. Whether a shipbuilding yard for the repairs and construction of the barges employed in the establishments, and attached to the salt works, is, for the purposes of the Act, considered part and parcel of the factory?

"3rd. Whether a farm attached to the salt works, and the labourers, agricultural or otherwise, is considered part and parcel of the Factory?

"4th. Whether a wych, i.e., pan-house and stove, worked by a man or several men and their families, as has been the custom in the salt trade, for the manufacture of certain descriptions of salt, since the times of the Romans, and which wych or wyches stand quite isolated, and form separate blocks of buildings, is considered parts of the factory? I should state that the contractor or occupier of a 'wych' has no stated hours of work, receives no wages from the salt proprietor, but simply delivers certain quantities of salt at fixed prices to him, and pays in return wages, or an equivalent, to the hands which assist him, if they don't belong, as is more generally the case, all to one family.

"5th. Whether a rock salt mine, worked 100 to 160 yards underground by a company of miners, but attached to some of the salt works, is considered part and parcel of the factory?

"6th. Whether repairs of pans and furnaces, which have to be done frequently at night, must be done by the craftsmen, without their 'young persons,' their attendants, or whether the latter may work along with them for all the purposes of repairs?

"For information, I may state that the salt manufacture is one of the healthiest occupations in the world, but it has to be carried on continuously, night and day, as it requires many hours to bring the brine to the right point for crystallization; and that heat must be kept up from Monday morning till Saturday night. Regular hours, in the strict sense of factories or other trades, are unknown in the salt trade. The men, mostly by arrangement, work as they please, the masters being quite indifferent as to hours, so long as the quantum of work is performed. It will therefore be exceedingly difficult to perform the stringent regulations as to time of the Factory Acts, and under any circumstances the trade would ask you kindly to place them into the

category of those trades which are permitted to employ young persons on night shifts.

"If, for the purposes of obtaining this permission, any further technical or parliamentary proceedings are required, the chamber will feel grateful to you if you will point them out, as they will ask their M.P.'s to get the necessary orders from the Secretary of State, if such are required."—Signed by the Chairman.

After the receipt of this communication I went over to Wynsford, accompanied by Mr. Steen, to keep an appointment specially made with the Chamber of Commerce for a day fixed, in order to go with them fully into its details, which, it must be quite manifest, could not have been replied to by letter. Nobody, however, was present to meet me, and though I drove over to Northwich, in the hope of finding some member of the Chamber, I could find no one to communicate with, and I have had no application from them since. Some of the salt works I did see, and, afterwards, others in the neighbourhood of Droitwich, and from inquiries I made of managers and others, there appears to be nothing in the salt manufacture to prevent its being brought under factory regulations. For the most part, men are employed at the salt pans, where the heat is very great, working in a semi-nude state for a while, then clothing themselves in flannel and resting. These pans are working unceasingly, unless stopped for repair. The boys' work consists in wheeling the salt, when bagged, to the boats waiting to receive it, for which service they receive 1*s.* a day ; boys of about 13 or 14 years of age, sometimes doing nothing for days together. I saw no woman employed about this manufacture in these neighbourhoods.

Slate Quarries.

On the 24th of June I visited, with Mr. Sub-Inspector Kent, the slate quarries of Lord Penrhyn, at Bethesda, near Bangor, and, by appointment, saw Messrs. Francis, senior and junior, on the quarries. This was necessary, since Mr. Kent had reported to me that the quarry owners had declined to be placed under the Act, and that in many places, numbers of young boys were employed without the usual schooling. I am informed that, as many as 3,000 persons are employed on these quarries in raising and splitting and otherwise adapting, the slate for market. Speaking of the Bethesda quarries, no women are employed in any process, nor any boy under 14 years of age, so that the clauses of the Act which refer to the labour of females and the employment of children are inoperative in these extensive

works. Happily, too, no children have been dismissed from them on account of the Factory Acts. None are ever employed. There are, nevertheless, National schools for the education of the young, which are under the inspectors appointed by the Privy Council; and, if I understood Mr. Francis right, night schools also, for such as chose to avail themselves of them. I did not visit any of these schools, as they did not contain children under my supervision. I should have done so, probably, but for an evident jealousy of the interference of factory officials which was apparent in Mr. Francis's manner, who, whilst, with the utmost politeness, he afforded me every explanation that I sought, frankly referred me to Lord Penrhyn himself for any official information which I might desire otherwise. "It was the opinion of Lord Penrhyn," he said, "that slate quarries did not come under our comprehensive "Act." My reasons for my belief that they did, might, to a certain extent, convince, but did not satisfy Mr. Francis. Happily, however, my duties were exceedingly simple though peculiar, at these apparently admirably managed works. They were simple, because the hours of labour of the young persons who fell within the provisions of the law were all the year round within its commencing and terminal points; and they would have been peculiar, because, so far as I could judge, I should have had nothing to do but to recommend the habits of the people at these works, and their general management, to the consideration of others.

The subject of reporting accidents and of whitewashing premises had, apparently, presented itself to Mr. Francis's mind as somewhat absurd, and as unnecessarily exposing the danger or suffering occasioned by quarrying slates. But of course there could be no need of whitewashing where there were no closed buildings; and as for reporting accidents, the hospital which Lord Penrhyn has necessarily provided for the reception of the severest forms of accident, as well as for the treatment of diseases among his workpeople, is a report itself that accidents do occur from time to time amongst the workers, as in other works; and their analysis by official reports could do little more than add them to the common number. Minor accidents must necessarily be numerous when people are dealing perpetually with such articles as slate, gunpowder, and guncotton, and where the falling of débris must be constant; and major accidents cannot fail to be severe, from the heights at which the people are perched and from the depths from which they look up.

The works at Lord Penrhyn's may, in fact, be called patriarchal. On the works themselves there appears to be nothing left undone which could add to the convenience of the workers; and outside, but for the bad language from some cheap "Trippers" from a textile district, as I was informed, I neither heard nor saw anything to be remarked as unfavourable to the slate industry, but very much to the contrary.

On the 25th I visited the slate quarries in the Llanberis Valley, belonging to Mr. Asheton Smith, and found that, though immensely large works, neither these, nor any in the valley, are under the law. The proprietors have generally been informed that they are not under the Act in any way, so it is said; and they have been waiting to see whether any steps would be taken to place them under. In the meantime they say they are taking the highest legal opinion on the matter. I only called at Mr. Smith's quarry. I was received, as at Lord Penrhyn's, with great civility, but with quite as much caution; with "a doubt whether they were under the law or not," but with an evident determination in every way to avoid its responsibilities, if possible. In this case also, the reporting the accidents appeared to be also one of the great objections, so frequent and serious are they; often arising during blasting, and frequently from disobedience or neglect of precautions, just as in textile works,—causes and effects alike. In these quarries I found the proportions of persons employed to be about as follows (no females being employed at all): To 1,000 men, children under 13, 50; young persons, 160. Of the children, many are said to be between eight and 11 years of age, working, of course, any hours within six and six, at the pleasure of the employers, but not exceeding these hours, nor after 12 on Saturdays, but not attending school as workers. Here also are hospitals for the sick as well as wounded, established by the proprietors. They form, in fact, an essential part of the works, just as surgeons now are appointed to all railways and collieries, &c.

The wages of these quarrymen vary, from labourers at 18*s.* a week to skilled labour at 3*l.*, and of boys from 7*s.* or 8*s.* to 14*s.* or 15*s.* Many of the little boys make their first essay in slate splitting, on pieces of rock cast away by the workmen, out of which they make all the slates they can, and sell them to the men, who return them to the establishment.

The religious character of the quarriers is excellent; compared with England it might be called extraordinarily so. The sabbath is kept from early to late hours, and the attendance is undeviating. The women are evidently hard

worked, though they are not engaged in the quarries. I am told also that the economical element of the Welsh character is equal to the religious element. Many of the quarrymen reside in their own houses, of which there are not better specimens in the Haut Rhin, either for comfort or appearance. I am afraid, however, that this appearance of outward comfort is productive of privations which considerably affect the physique of the inhabitants. It must also be borne in mind that, slate quarrying is not a trade in which it can be said children are not usefully employed, and if the race is to be kept up, early labour must have its share in the work. It may be possible there are settlements, such as that at Bethesda for example, where the population is so dense that, earlier labour than that of 14 years can be dispensed with. But the quarryman's position is greatly dependent on positive, and not on negative obedience. In this respect history again repeats itself. Fines may precede dismissal for once or even twice, but seldom oftener. Indeed I was deliberately asked, and I mention the fact to show the interior mind of the inquirer, whether if $\frac{1}{6}$th of the workers in a quarry where many thousands are employed were at once discharged, the law could be avoided? And had I answered in the affirmative the idea might have been carried into effect, and the evictions would have been attributed to the harsh interference of the law, and not to the care with which the law had been called in to supervise industrial operations with reference to educational neglects.

The grounds on which I ventured to think slate quarries were amenable to the Factories Act Extension Act, 1867, were, first, that by that Act, beyond any definition of the word factory in the 7 Vict. c. 15. s. 73., a factory is further defined to mean "any premises, whether adjoining or separate, in the "same occupation, situate in the same city, town, parish, or "place, and constituting one trade establishment, in, on, or "within the precincts of which, fifty or more persons are "employed in any manufacturing process;" and—

Manufacturing process to mean "any manual labour "exercised by way of trade or for purposes of gain in or "incidental to the making any article or part of an article, "or in or incidental to the altering repairing, ornamenting, "finishing, or otherwise adapting for sale any article."

Now, though it is true that the word "premises" is a very unsatisfactory word in an Act of Parliament, yet it is sufficiently defined by Webster to mean houses or lands. A quarry, therefore, falls properly under the word "premises," and is therefore a factory, within the meaning of the Act of Parliament, if fifty persons are employed.

There is too the word "manufacturing process." I think there can be little doubt but that, the dislodging a block of stone from the matrix in the earth, raising it to the surface, and splitting it into various articles, is an adaptation of such an article into other articles for sale, and by a manufacturing process, in consonance with the 3rd section, where it is used positively to denote something more than a covered building, such as is popularly associated with the word factory, for the section carefully discriminates between works carried on in the open and under cover, by the use of "in" and "on." Thus, in paragraphs 1 and 3, "in" and "on" are used, but in 4, 5, and 6 "in" alone is used, while in 7 there are the wider terms "in, on, or within the precincts." I quite concur in the view that if the blocks were dislodged only, and as dislodged, conveyed to the ports for manipulation elsewhere, there might be no factory and no manufacturing process at the quarry. But it is by the adaptation of these blocks into slates of various sizes, tanks, grave stones, chimney pieces, &c., carried on at the quarry, that the slate quarry falls within the Act. With respect to a quarry being a trading establishment I presume there cannot be a reasonable doubt. If the occupier of a quarry were to fail in his business I take it he would be as much subject to the bankrupt laws as any other trader.

The managers of Mr. Asheton Smith's quarries promised to consider what they would do as to being placed under the law, and to supply me with certain names of boys working in their quarry within two or three weeks, if they declined to comply with its provisions. I heard no more from them, however, for some months; nor, until I found it necessary to direct Mr. Sub-Inspector Kent to take pro ceedings against them, to try any point they might raise in their own behalf; and I instructed him, at his request, to employ Mr. Louis, a solicitor of Ruthin, to conduct the case. Certain boys were taken as having been engaged without being registered or certificated; and the case was argued before a full bench of magistrates on Saturday the 26th of September last, Lord Newborough in the chair, who is reported to have observed that "it was ridiculous to "suppose that rules applicable to a factory, which he "took to be a building, could be carried out in a slate "quarry." The justices were therefore unanimous in dismissing the information, and a case for the superior courts was asked for and granted. The question will have therefore to be decided there. I would only at present further observe that Lord Newborough, if correctly reported, seems to have dwelt upon the definition of the word factory in the 7 Vict. c. 15., and to have overlooked the supplementary

definition of the same term in the Factory Act Extension Act, 1867, in which "premises are declared to be a factory," and that "premises may mean lands" as well as buildings. The following remonstrant letters from large slate quarry owners sufficiently show, I think, that the term factory, and the application of the law to them, are neither of them misplaced, according to their own showing.

"———— Quarry,
"Sir, 17 January 1868.

"I have duly received a parcel containing books and papers pertaining to the Factory Act, and in looking over and perusing the same I find that, by comparing factories and slate quarries, they are two very different occupations, and hereby beg very respectfully to render you some explanation relating to the manner our men work at the slate quarry. In the first place, they commence their day's work at six o'clock in the morning, and hold out until six o'clock in the evening, allowing proper time for meals; and also on short days from light to light; and work in groups, each group having a bargain or contract, let monthly, and are paid accordingly every month; and further beg to say that the said slate quarries are worked in open country, having open entrance from all directions, thereby a large abstract of the rules hanged up, without having many of them, would be unavailable for all the men; and further remark that the men leave off work every Saturday at noon.

"We have few small steam engines on the quarry, for raising the slate rock to the surface after being blasted by powder, and the said engines are attended by experienced men to take charge of driving them; and while quoting for that department I merely remark, that several farmers in this country make use of small engines for working the thrashing machines, and by that means save men and time.

"In respect to children under 18 years of age, we have but few comparatively on the quarry, and employ no females; and the children are on very free terms with their work. They go amongst the débris, or, as it is termed, the rubbish, and pick out pieces of stone, and make small and inferior slates from them, and are paid individually for what number of slates they make; thereby they need no one to stimulate them, as they are in one respect their own masters, while they make the said slates marketable. And furthermore, they do not confine themselves to the same quarry, but change from one quarry to another, as may best suit their purpose; a lot of them as may be working with us one month may not be with us another month; thereby we have no control much over them, no further than that we get the slates they make, and paying for the same.

"And in respect to schools we beg to remark that we have few public schools in the locality. British schools and national schools are not altogether free, for the children have to pay a small portion for their education. I must admit that a considerable number of the children of this locality has had very fair

education within these last few years, as much as they are pretty generally able to read and write, and regret at the same time that a number of parents do not appreciate education in the measure they should, and which has been the means many years ago to neglect that desirable duty ; and I may say, as quoted before, that we have as yet few of that neglected class amongst us which do not set the value they should for the privilege of obtaining plain education. I further more humbly beg to say, that as I am unable to find how the Factory Act could be made applicable to the slate quarries, although very anxious to improve education as much as possible, and therefore humbly beg to submit to you my views on the subject.

"I have, &c."

Secondly :—

"Carnarvon,
"Dear Sir, 31st Dec. 1867.

"I beg to state, as concisely as possible, my difficulties in applying the Factory Act to quarries generally, and to mine in particular ; and further to point out how the present Act fails in reaching the evils it is intended to counteract.

"Referring to the abstract of the Act which has been sent to me to hang up for public inspection, I wish to point out,

"1. That it is useless, unless also put up in the Welsh language.

"2. The definition of factory, coupled with that of manufacturing process, are made to include quarries, but only by a straining of the sense of the word, which would just as readily include a farm on which a small water-wheel was used for churning as our quarry.

"3. Limiting the Act to establishments employing fifty or more excludes from observation the small quarries and works, where, as far as my observation extends, the only cases of neglect and overwork are to be found.

"4. There is no entrance to the factory at which abstracts can be hung up, there being no enclosed workshop accessible to all hands.

"5. The only children employed in quarries are employed in making slates out of slate blocks which they pick up here and there throughout the works ; they come and go when and where they please, having no regular hours for either. They are often employed by sub-contractors ; and it will require a great change of organization to exercise any control over their time and employment. If our quarry alone in the district is subject to such regulation, our men will at once leave us, and our works will be at a standstill.

"6. The terms fixed for winter employment, namely, between seven and seven, are not customary, and inconvenient for quarry work. I cannot understand why the usual time six to six should be departed from.

"7. The regulations about half holidays are unnecessary, because all work is done by the piece or contract, and men, boys, and young persons take holidays as suit their own convenience ;

while a general half holiday would prevent much work from being done safely and with advantage to the contractor.

"8. There is a provision against accidents from shafting, &c., of which we use none, but no provision against insecure chains, ropes, &c., nor against working the quarry so as to prevent accidents, all which are fruitful sources of accidents, but these precautions being matters of expense are neglected by many, and chiefly on those premises where less than 50 are employed.

"I wish most particularly to draw your attention to the fact that the application of the Factory Act to any trade establishment involves of itself some additional cost, and as affecting the dealings between employers and employed is more or less a restraint on trade.

"If our establishment alone, out of the whole of this district, is to be subject to the Act, this restraint upon trade is sufficient to put a stop to our trade altogether, permitting others to purchase labour in a cheaper and freer market than would be open to us. Further, to apply the Act to premises where fifty or more are employed, and to exempt others, is similarly giving a premium to small establishments, which in this district at least are full of the defects which the Act is meant to remedy.

"If it is not taking too great a liberty, I would suggest that you should see a quarry or two, and satisfy yourself of the points I have advanced; and perhaps afterwards you may be able to suggest some way by which government inspection may, with advantage, be applied to the industry of this neighbourhood.

"I beg to assure you that I am quite sensible of the great advantages which would accrue from such inspection if applied in the right direction; and I shall be most happy to be of service to you in any inquiry you may desire to make.

"I remain, &c."

The writer of this latter letter is a gentleman who knows so well what good the Factory Act has accomplished in the textile districts that I am not at all surprised at its last paragraph; and I am sure he means fully everything that he has said. I therefore take the opportunity of showing, seriatim, that his objections have been met in the main by the Factory Act Extension Act, 1867.

1. The abstract has not yet been put in the Welsh language, but I think it ought to be, and I will submit that it should be.
2. There is no more straining of the words "factory" and "manufacturing process" with regard to quarries, than to any other occupation; and it would only need a farm to employ upwards of fifty persons to bring it under the same conditions, whether there was a water-wheel or not.
3. I quite agree that the limitation of fifty hands is objectionable, and that neglect and overwork are to be found oftener in smaller works than larger ones.

4. An entrance to a quarry is as well defined as to a building, and there may be many; but the right of way is as well understood as a stile in a field, or through the only entrance, the gate.
5. The very fact of children making slates even out of débris, and being paid for the work, no matter whether by the occupier or sub-contractor, is a proof of the manufacturing process sufficient to warrant the introduction of the Act to such employment. The occupier obtains the produce of the children's work, and renders it, inter alia, an article of gain.
6. The terms of winter employment are not fixed, but optional. Occupiers may work all the year round, if they please, from six to six, by law, or only during daylight in winter.
7. Leave is given by the Act to vary the holidays, at the pleasure of the employer and employed, and in no case, but Christmas Day and Good Friday, need a general holiday be given. Whilst the employers may make a general holiday of their own, and it may be considered as a legal holiday.
8. The provision against unfenced machinery in the Factory Act could "be strained," I think, to insecure chains and ropes. It applies to any part of the machinery of any kind or description likely to cause bodily injury to any person employed. The word "machinery" is a very comprehensive term, and not limited to gearing only. The fact of there being so many accidents in quarries, arising from disobedience among the men as well as neglect of masters, renders supervision the more needful.

Manufacture of Tobacco.

The manufacture of tobacco in my division is to be found in Liverpool, Leicester, Bristol, and in several other places, and in Ireland. There is a little also in parts of Wales, but very little. The total number of persons employed in it in England and Wales and Ireland, as given by the Children's Employment Commissioners from the Census of 1861, is as follows:—

	Males.	Females.	Total.
England and Wales -	3,968	872	4,840
Ireland - - -	916	84	1,000
	4,884	956	5,840

My returns show, for my own division only, as follows,

	Firms.	Horse-power employed.		Persons employed.								
				Adults.		Young Persons.		Children.		Total.		Grand Total.
		Steam.	Water.	M.	F.	M.	F.	M.	F.	M.	F.	M. & F.
England and Wales -	69	269	34	602	684	324	531	223	91	1,149	1,306	2,455
Ireland - -	61	35	—	616	6	659	4	256	—	1,531	10	1,541
Total - -	130	304	34	1,218	690	983	535	479	91	2,680	1,316	3,996

forming a condsiderable portion of the employés quoted by the commissioners.

These figures present a rather singular anomaly. In England, where the manufacture of cigars has attained an extraordinary growth, we see that 1,306 females are employed, and are more in number than the men. In Ireland, on the contrary, where the manufacture of "pigtail" is the staple commodity, out of 1,541 employés only 10 are females. I have been asked by several of the manufacturers of tobacco to recommend to the Secretary of State that their trade should be permitted to employ their people from eight to eight; but, with one exception, I have refused; and by the others, I have been very much reproached with that exception, namely, Messrs. Cope and Co. of Liverpool. I confess to it as a weakness arising from the urgent language of Messrs. Cope, who have done a great deal in making their workrooms more healthy than formerly, and in devoting much time and trouble to the welfare of their workpeople. Messrs. Cope said "they were about to enlarge their premises, to enable "them to carry out the six to six hours of the Factory "Act," and this is being done, the relaxation already permitted, terminating with the 31st of March next. My reasons for a general refusal to recommend longer hours were based on the nature of the manufacture itself, of the pungency attending some of the processes, of which for many years I have had an opportunity of some personal experience; and also that, there are no sufficient grounds for taking this class of works out of the category of six to six workers, to which it properly belongs, for social reasons as well as physical.

Mr. Lord, the Assistant Commissioner, at page 91 of 4th

Report, refers emphatically to Messrs. Cope's own evidence as to the nature of the work; and that evidence has been more than sufficiently confirmed by the testimony of the best informed persons elsewhere.

Mr. Cope says their occupation is not necessarily unhealthy, far from it, but the absence of all effectual ventilation in many workrooms frequently makes it so. "In our own case, before we had the whole present width "of this building, there were windows only along one "side, and a blank wall opposite At that time, as you hear "from our foremen, not a day passed without some one or "other of them fainting or going into fits. Many were com- "pelled to give up the trade altogether, and I began almost "to despair of making the women useful. But we broke "the wall down, and took in the whole space through "to the windows on the other side, and left the centre of the "building open from the basement to the roof; the result has "been, that, for the last six years, that is, since this alteration, "not one case of the kind has occurred. It used to be amongst "the younger ones, and those unaccustomed to the work, more "especially, that this took place; but with many it lasted for "years."

As to their educational state, the evidence of Mr. Mackay, foreman at Mr. Steel's of Liverpool, where they employ 90 or 100 girls, shows that one half of the number employed, the whole being above 14 years of age, "are perhaps able "to read. Certainly not one half can write. None that "I know of ever go to a night school. They prefer "walking about the streets, and going to places of amuse- "ment, to improving themselves."

It is gratifying to observe one good effect of the Factory Act Extension Act in this trade, among others. In the spinning of pigtail it was formerly the universal custom, as it is yet in a large measure, to employ very little boys in turning the spinning wheel all day long, and for very long hours. Mr. Cope, writing to me on the 24th April last, refers to this, and says, "You will, we think, be much gratified to "learn that in this factory we have been enabled to put "an end to that cruel system of employing young people "in turning the spinning wheels in the twist department. "Our wheels are now moved by the steam engine. The "new system answers far better than the old one. It was "the new Factory Act which first directed our attention "to the subject; and if the Act does even nothing in the "tobacco factories beyond this it will have accomplished "one most humane reform."

If this was one of the conditions of the trade in which

the manufacture of pigtail was only a secondary employment, what must it be still in Ireland, where the old system is still practised, where long hours without food have been prevalent, and where many of the places called factories are unfit for human occupation?

Mr. Assistant Inspector Ewings, writing from Dublin on the 16th of May last, says, "I have this week visited many "of the tobacco manufactories, where our interference "is very much needed. In these works the very lowest "and poorest classes of children are found of all ages, and "working up to the present time at all hours, and for very "little wages. It has been usual for them here to work "from 8 a.m. to 4 or 5 p.m., without any interval for "meals, and this they tell me arises from the pilfering "propensities of the hands, who are regularly searched "every time they leave the factory. At ———— "they were not working on Tuesday, but on Saturday "they started again, and continued to work, many of them, "until 4 or 5 o'clock on Sunday morning. This would "have been a case for prosecution, had the law been put "in operation earlier."

The report of the certifying surgeon at Belfast on these factories is as follows: "With the tobacco hands, who are "very low in the scale of education, and in point of health "are very sickly looking, and are also small and badly "nourished, on commencing to spin, they often complain of "headaches and nausea and vertigo. The factories, with "one or two exceptions, do not deserve the name of factories "at all; they are badly ventilated and small."

Shipyards and Marine Engineering.

The question of the application of the Act to shipyards and marine engineering is one of considerable consequence as well as of considerable difficulty. The Act is clear in its definition of premises in which steam, water, or other mechanical power is used for moving machinery employed either in the manufacture of machinery, or in the manufacture of any article of metal not being machinery, such, for, example, as a spade or a ship; and in its definition of a manufacturing process, *i.e.*, manual labour in making, altering, or repairing any article. But when all these subjects are comprised within one establishment, when emergencies, such as storms, or waves, or simply tides, have to be considered in relation to them, complications arise, or might arise at a moment's notice, which must be foreseen, if the law is to be maintained under them all. The whole

question, however, resolves itself, thus, viz., first, what are premises, and who may be considered the occupier; and, secondly, what are the circumstances under which persons employed on the premises should be exempted temporarily from the Act, in order equitably to bring work, on the premises and off the premises within the same category?

Ships, for example, are built on slips, in yards, or in floating docks in the same yards, and they may be repaired in graving docks, or on the strand, or elsewhere. They may be built by the workmen and boys that are incident to the premises and to any kind of work within the premises, and they may be repaired by the same workers, all of whom being under 18, would come under the Act; or they may, impromptu, be added to by other boys not under the Act, because not belonging to the premises absolutely, but taken on for a temporary purpose.

But a ship may be repaired also under other circumstances. Having met with an accident at sea, for example, she may be docked at noon, and require to be repaired so that she may proceed on her voyage the following tide, or within a tide or two, or within a few days; and more than one ship may be in the same dock at the same time, and the repairers of each ship may be persons partly employed by an engineer under the law in his fixed works, but with a mixed lot of men and boys away from their own works, half being picked up from amongst loiterers for work by the dock side, and therefore not under the law; or by an engineer who has no fixed works, and is not, therefore, under the law anywhere, or by repairers on their own separate account. A ship may thus be repaired within a tide or a week or a month.

It is admitted, I believe, that on premises occupied for the purposes of ship building and ship repairing, over the whole of which premises a proprietor has sole control, the Factory Act Extension Act is operative fully, and whatever comes within such premises to be repaired, must be repaired subject to the law. The question, however, has been ingeniously suggested, whether a ship, with all her equipments, being in fact other premises complete when at sea, does or does not continue such other premises whilst in the dock, though the dock is within the premises of a separate occupier; and that, therefore, any persons working upon or within her are removed from their ordinary premises, and for the time being are not subject to the Factory Act, a proposition very needful to be considered, since the work to be done on or within such ship is mainly to be

done at night, and by boys who possibly may have worked all the day previously?

There does not, however, seem to be much in the query really: for the ship is an article brought on the premises under the law, to be repaired, just as if she were a crank or a shaft or a boiler; and so long as she is there, she must be subject to the jurisdiction and circumstances of the occupier, as it appears to me.

What then are "premises" under the law and its various penalties?—Clearly those in which ships are either built or repaired by the workers incident to these premises occupied by a firm.

What are premises not under the law?—Graving docks, or foreshores, or other places where repairs are executed by groups of workers employed only for temporary purposes, and not occupied exclusively by any one firm.

And these groups may consist partly of the boys of an engineer under the law for making or repairing "articles of metal," who have worked all day and legal times, but are requested by their employer to assist in the accidental labour which requires to be performed in over hours, along with painters, carpenters, caulkers, and others who have been picked up to perform incidental repairs of their own kind, whilst the engineering repairs were being carried on also; and all these labourers may be required to work, say all night, in anticipation of a tide. Can the work of such boys, thus working overtime, on the register of an occupier under the law, requested, but not required by their employer to assist in executing the order, be deemed to be under the law or not? My opinion is that it cannot. It is as if they were appropriating their leisure hours to their own purposes, which the law does not interfere with. They are not on the premises where they usually work; and though they may be assisting the same master, it is not on a part of the contract for which they receive ordinary and regular wages. It is, in fact, as if these boys had all left work, and were loitering about the docks when their own master receives an unexpected order to repair a certain ship, finds no hands in his shop, comes down to the dock to see what labour he can procure, and engages simultaneously as many persons as he can find, his own boys and other people's boys and men among the rest, for a work which is emergent.

But can the workers of the occupier under the law, do the same thing within the premises where they ordinarily work, *i.e.*, can they continue to work after legal hours on any emergent work whatever? I think they cannot. The law limits them to certain hours, and forbids overtime;

hence his hardship. But assuming for a moment that any such case had occurred as a ship entering suddenly the dock of a celebrated builder for tidal repairs after factory hours, where there were not men sufficient without boys to do the work, would such work be refused by the occupier because of the law's interference? I feel quite sure it would not. With the knowledge that it could be at once taken to a public dockyard and attended to, it would not be turned from a private dockyard, let the penalty be what it might. Thus there would arise a defiance of the law of an extremely inconvenient character. The case might be carried further: assuming a time of war instead of peace, would any law stop these tidal repairs in Her Majesty's or in any other dockyards? I think not.

In making my inquiries the question was put to me as to the practice of Her Majesty's dockyards. I was not able then to answer it, but I believe I can now say, the Factories Act Extension Act, 1867, is carried out in these yards.

The legal difficulty with the public dockyards is, to find an occupier. If this could be done, the law could be as well carried out in them as in private yards. It does not appear that they can ever be termed workshops; for, for every kind of repair a ship may need, workmen and boys may perform it, subject to no master whatever, and entirely on their own responsibility.

Mr. Sub-Inspector Beadon obtained the following answers to questions which I directed him to put in the dockyards of the Hants district:—

"*Q.* Are the private dockyards at all the places within your division under the law?—*A.* I cannot yet answer this question positively, but my impression, from my researches, is, that my predecessor has visited and placed under the law all who appeared to him to be so; and, as regards myself, you may depend on my seeking out and placing under our control every firm who can possibly be so dealt with as soon as possible.

"*Q.* What are the hours worked? —*A.* The hours seem very regular, and rather within factory hours. In winter they seem very short. The usual summer hours are 6 to 6 or 6 to 5.30, winter less as to daylight.

"*Q.* What is the difference when engaged in new work and when on repairs?—*A.* The only difference that I can hear of in this respect is that a curious custom exists in most Plymouth yards, that on Saturdays the hands engaged on new work leave at 5 p.m., and when on repairs at 4 p.m. Overtime seems to be rare, even on urgent repairs.

"*Q.* Are the hands repairing taken from the works only, or are they introduced?—*A.* It is arranged thus: In order to keep a certain staff of men and apprentices always on hand, a stock ship is laid down, and kept going when there is nothing else to do; and when repairs come in to be done the hands go and do them, or so many as are needed.

"*Q.* Is work carried on by anybody you can construe to be an occupier, or is it only permissive, *i.e.*, fulfiling a contract or an order, in the ordinary way, as in other trades?—*A.* I must reply to this as follows: In Her Majesty's dockyards contract work seems to be almost unknown. In private yards it is chiefly contract. Public dock companies do no work, but merely let out their dock and slip place to any shipbuilding firm, who work their contracts on the space thus rented, and are occupiers of such space pro tem. Some rent permanent space thus.

"*Q.* Are the workers brought generally, or ever, from any factory, or are they picked up from the quay as occasion may require?—*A.* Where temporary space is rented, the workers come chiefly from the factories of the firms. When extra hands are needed I find there is no difficulty in getting them. It soon gets known that a particular firm wants hands, and plenty of applications are made for work at once. The trade societies too, publish it through their organized machinery of management that hands are wanted, and the employers tell me they have no trouble to seek for hands.

"*Q.* Are small boys employed on such occasions as rivet boys?—*A.* My information is somewhat conflicting on this, but preponderates in the direction that they are not generally so. Indeed it seems that the boys employed in this kind of work are generally turned 14 or 15 before they are taken on or bound. The principal instances in which I have reason to believe boys of 10 are employed are, 1st, in what is termed 'scuffling boilers,' *i.e.*, scraping the salt from the inside after each voyage; 2nd, in 'bilging,' *i.e.*, cleaning out the bottom of the vessel from the mud and water and other obnoxious accumulations. These boys seem to be a low class of arabs, who are to be found at these places ready and willing for the work. They are not regularly employed anywhere, and are a species of scavengers. Their hours of work are, of course, equally irregular. 3rd, I understand small boys are employed in the rope and oakum department in H. M. dockyards, of ages from 9, 10, and upwards, who are not apprenticed, but mere labourers; and that no care is taken with the education of these as is taken so admirably with the apprentices. Their hours are certainly not half-time. Indeed this seems to be a blot on the Government

establishments (nearly the only one I can discover), which it would only require to have pointed out to have promptly remedied."

These irregular labourers constitute the main part of the difficulty of the case of shipyards, for, as may be imagined, they are subject to no control which can be brought to bear on their personal labour. The question, however, whether it is needful to alter the law or not for the labour of shipyards thus turns upon two material points; first, as to occupancy, for the occupier is the person liable under the Factory Acts; and, secondly, as to employment, *i.e.*, whether the boys employed all day in the factory can be employed by or with the cognizance of the same master out of the factory, overtime. What is meant by the word factory? By the 7 Vict. c. 15., margin "factory," the word factory is to mean "all buildings or premises within the close or curtilage "of which any mechanical power is used to work any "machinery." By the 7th sect. 30 & 31 Vict. c. 103. factory also means "any premises, whether adjoining or "separate, in the same occupation, within the precincts "of which 50 or more persons are employed in any "manufacturing process," and "manufacturing process" means "any manual labour exercised by way of gain, in "altering, repairing, finishing any article." As, however, in the public dockyards there is no steam power employed within any curtilage, nor can they be said to form part of any factory occupation (for the occupier of the dock is the captain of the ship that is in for the time being, or ships), and the repairers are merely persons called in by him to repair the ship's damages, I conclude that a public dock is not a factory within the meaning of the Act.

Then, secondly, can boys who have already worked a legal day in a factory be employed in a public dockyard after these hours are over? The restrictions as to overtime are twofold; first, as to children, who by the 30 sect. 7 Vict. c. 15. are not permitted to work in any other factory, after having been employed before noon in any factory; and, second, by the 13 & 14 Vict. s. 1., wherein it is enacted that no young person shall be employed in any factory after 6 p.m. It appears, therefore, that if a public dockyard is not a factory, there is nothing to prevent any persons being employed therein at any hours nor at any age, and that no cognizance can be taken of any previous employment of such workers during the same day.

Then follow two other considerations, first, are any repairs carried on at Pembroke, Devonport, Plymouth, or elsewhere, and if so at what hours? Is there any restriction on the

workers in them? And, secondly, is it desirable that the repairers in private dockyards should in repairing processes, and in those only, be allowed the same privileges as the repairers in the public yards?

I have shown that, according to the best obtainable evidence, repairs are carried on at no other hours than between six and six in summer, and during daylight in the winter, in H. M. dockyards.

The second question opens up the still greater one of competition between factories and workshops,—between those that employ 50 hands and are under the law, and those that, employ 49 and under and can work 10½ hours between five a.m. and nine p.m., without any of the systematic requirements which the Factory Act enjoins.

The only possible reason for any relaxation of the law consists in the fact that, most of these repairs are tidal services, lasting one, two, or three tides, or possibly from new moon to full. The fact of a vessel entering a port to be docked, that she may leave it again in a tide or two, is an exigence of considerable importance. I am, however, of opinion that it is not necessary to alter the law to meet it. I think that on all occasions of tidal overtime there might be given to the ship-repairers a general permission to work boys of 16 as if they were 18, and also that, such factories might on such occasions be classed with those mentioned in s. 17, Factory Acts Extension Act, 1867, and that the Secretary of State might give leave for boys of between 13 & 16 to work overtime, or all night on alternate nights, so they did not work at all during any day. The scope of this section is, I apprehend, quite large enough to equalize the processes between public and private docks as nearly as may be. The young arabs in public docks will eventually be amenable to the Workshops Act, when it is brought into effective operation.

Iron Works.

The state of the iron trade in my division was so seriously depressed in the latter part of 1867, and has been continually so since then, that the tables, though they show upwards of 60,000 persons employed in it, probably do not indicate more than three-fourths of what would have been the number had it been in its normal condition. Everywhere it was and is still the same, perhaps, however, worse in South Staffordshire than in some other districts; and very serious must have been the losses sustained by some of those engaged in it.

This state of things was unfortunate for the initiation of the Act, in a double sense. It not only enabled the

employers to discharge their hands under 13 years of age, but since they could be readily dispensed with, it was a real convenience to get rid of them. It was a reason also for the employers not entering into any extraordinary expenditure in gathering these forlorn outcasts into temporary schools until the bad times had passed away. "The Act," it was stated, "was the author of the calamity, and the people must "therefore stand by it." So great, indeed, was the panic at inspecting surgeons, schooling clauses, and probable penalties, that, though children of 11 years of age could have been employed full time for six months, and children of 12 for 30 months, all under 13 were at once discharged, and in many cases under 16. Thus a gentleman at the head of a large firm writes on the 25th of January of this year:—

"For our information, could you let us know if we discharge every boy under 16 years of age, employed at these works, shall we be exempt from the Factory Act altogether, because we have already done so, and now we are beset by the parents of the children to take them on again, as in most instances we find the mothers are widows, and dependent on their children for support, and the relieving officer informs me that the applications for relief on these grounds are most numerous, and the poverty caused by it is immense. Most other employers of labour have discharged their boys. It comes into action at a most unfortunate time, with the slackness of trade and dearness of bread. The few shillings earned helped a family greatly. The men who have had their boys discharged are most clamorous, and we do expect some great disturbance will take place."

So also from Merthyr it was announced as follows:—

"*Employment of Children.*

"The operations of the Factory Acts with regard to children will now come into operation, and a great number will be dismissed from the iron works. The special clause which enjoins that children under a certain age must have six hours schooling daily will work injuriously, and in this way; by the clause the employers must see that the children have the schooling; now at the present time labour is cheap, and children too plentiful for employers to engage a class who require such attention; the result is, that a great deal of youthful labour will be dispensed with."

This panic is, I hope, overlived, for once again a few children are being tried half-time: and possibly, when trade revives, there will be as many half-timers at school in the iron districts as could reasonably have been expected; at all events, under these circumstances, the Act cannot be said to have had a fair trial amongst the iron workers.

At the commencement, there arose a difficulty in the

construction of the first and second temporary modifications when compared with the terms of the 17th section. The 17th section permits male young persons in certain trades to be employed in the night, and the first and second temporary modifications permitted children of 11 and 12 years of age to be employed for the same time and on the same conditions as young persons of 13 years of age might be employed, in pursuance of the Factory Acts. Everybody appeared to omit these last six words from their consideration, and to deal with the sections as if children of 11 and 12 years of age might also be employed in the night. And it took no little persuasion to show that the 17th section referred to the labour of those who were really young persons, i.e., above 13 years of age, whilst the first and second modifications referred only to the labour of children who for a limited period were to be permitted to work factory hours, and therefore specially not in the night. At last, however, it became understood; and ever since then, children of between 12 and 13 have only worked between six and six.

The seventh temporary exception, by which women may be employed about blast furnaces as they were wont to be employed about them before the passing of the Act, is in my opinion a great blot, which never ought to have been sanctioned. Happily it will terminate in July 1870. I need only state that on the night of the 27th of February 1868 a woman of the age of 19 was violated whilst engaged in her work on an iron mill, to show why I so consider it.

In enamelling processes, and in all processses dealing with molten metal, where the furnaces once alight are kept continually in force night and day, the law has been relaxed to permit of youths of 16 years of age working as men, and of boys between 13 and 16 working at night on alternate nights; and in my opinion these relaxations should be continued after the 31st of March next. The following Special Rules, having received the Secretary of State's sanction, are now in force in most of the iron works and blast furnaces of my district. They have been framed under the 15th section of the Factory Act Extension Act, 1867, following somewhat the principle laid down with earthenware works in the Factory Acts Extension Act, 1864. The operation of the rules is not to clear the manufacturer from the violations of the law, but to give him power over his workpeople who sub-employ, so to speak, in his works,—the persons for whose lâches he might be called in question. The difference between the two cases consists in the amount of the penalty to be inflicted; the manufacturer being liable to a penalty of 3*l.*

or 5*l.* for an offence, or more; whilst the workman can only be fined 1*l.* for his neglect of his master's order.

"SPECIAL RULES.

"FACTORY ACT EXTENSION ACT, 1867.

"Name of Factory_____

"Date_____

"The following Special Rules have been made, under the authority of the 30th & 31st Victoria, Chapter 103, s. 15, and are applicable in Blast Furnaces and Iron Mills.

"1. For the purpose of securing compliance with the provisions of the Factory Act relating to surgical certificates and registration, the actual employer shall present any person under 18 to the manager or occupier for entry in the register of young persons.

"2. The actual employer must also notify the discharge, dismissal, or leaving of any young person under 18 years of age to the manager or occupier.

"3. It shall be the duty of the actual employer, so far as relates to the persons employed by him, to see—

"1st. That no child under eight years of age is permitted to come, or allowed to remain on these premises, except for meal-hour purposes.

"2nd. That no child under eight years of age is employed on any pretence whatever.

"3rd. That there is no working overtime, contrary to the law.

"4th. That overtime is reported to the manager.

"5th. That no child under 11 years of age is employed without the proper certificate.

"6th. That no one not on the Register, to whom the Act applies, is allowed to work on these premises.

"Any actual employer committing a breach of any one of these rules will for every breach be liable to a penalty not exceeding 1*l.*

"*Approved,* GATHORNE HARDY,
Whitehall, London,
this 19*th day of May* 1868.

"I hereby certify that the above is a copy of the Special Rules approved by Her Majesty's Principal Secretary of State, and established for the above-named works.

"As witness my hand, this 20th day of May 1868.

"ROBERT BAKER,
"*Her Majesty's Inspector of Factories for the District in which the above-named works are situated.*"

THE GLOVE TRADE.

The glove trade in Somerset and other places has been placed under the Act under some difficulties with respect to the residence of the workers. But Mr. Buller writes from

Frome on the 18th May, that "Mr. —— had told him his hands like this Act very well. They like the regularity of the hours."

Mr. Sub-Inspector Buller also writes more recently:—

"When I was at Yeovil the other day, I found that, several of the glove people there had voluntarily agreed to work factory hours, although they did not employ 50 hands, and were not under the Act. The Act seems to be liked there on the whole, though by some it is feared that the amount of work done will diminish when the two o'clock limit on Saturdays comes into force; in fact, some think that, the amount of work has already diminished. Others, again, say, this is not the case; that the hands do quite as much in the short time as they did formerly. All the large glovers are sore at the Workshops Act not being enforced. They did bring the matter before the Town Council some time ago, but entirely without effect. Nobody likes to take the initiative: and the Council being elected annually, anybody who did make himself busy, would probably find himself ousted at the next election. They would be glad to see the Workshops Act made compulsory, and a fine imposed on the Council for not enforcing it. This suggestion was concurred in by one or two glovers, who are themselves members of the Council. At one of the largest glove places they told me that, their women, having left work at six, go and work afterwards in some of the workshops. In one or two of the glove shops they already leave off work at one or two o'clock on Saturdays."

The Clothing Trade.

Of the Clothing trade Mr. Steen writes:—

"Considerable inconvenience was here anticipated on the necessity of changing the working hours in summer from seven to six, instead of from eight to seven. The manager now states that the change works well, and he is quite pleased with the alteration. The workers, all females, are quite in favour of it."

Boots and Shoes.

The Boot and Shoe trades at Northampton, Leicester, Stafford, Bristol, Chester, and elsewhere, amounting to upwards of 10,000 employés, are all, to the best of my knowledge, working under the Act. The commendable spirit in which the Northampton Chamber of Commerce set themselves at once to meet the change of hours of work, and habits consequent thereon, deserves to be recorded. The following circular was very early issued, and has not since been departed from, to the best of my knowledge.

"The Factory Act.

"At a meeting of the shoe manufacturers who come under the 'Factory Act,' held in the Chamber of Commerce, for the

purpose of making some general arrangements with respect to holidays, meal times, and working hours—

"It was unanimously resolved, That the hours of working, from the first of October until the thirty-first day of March, be from—

8.0 a.m. to 1.0 p.m., and from
2.0 p.m. to 7.0 p.m.

"From the first of April until the thirtieth September, from—

6.0 a.m. to 8.0 a.m.,
8.45 a.m. to 1.0 p.m.,
2.0 p.m. to 6.0 p.m.;

and, in compliance with the temporary exception clause of the Factory Acts, that the factories close on Saturdays for children, women, and young persons at half-past four, and for adult men at five o'clock.

"That the holidays, as required by the Act, shall be, for children, women, and young persons, Christmas Day, and the day following; Good Friday, one day; races, three half-days; Easter Monday, half-day; Whit Monday, half-day; Boughton Green Fair, half-day; but one half-day of the race time may be transferred to Whitsuntide.

"Resolved, That the Superintendents of the Sunday Schools be all asked to arrange their school treats for Boughton Fair holiday, to prevent the disarrangement of business which is consequent upon the present plan of giving them at various times.

"Resolved, That a circular be sent to all the manufacturers who come under the Factory Act, and an advertisement be inserted in the local papers.

"The necessary books and papers required by the Act will be supplied by the Factory Inspectors, 10, Whitehall, London, S.W.

"Any other information required will be given by

M. P. Manfield,
Hon. Sec. to the Chamber of Commerce."

The Hat Trade.

In the hat trade, which is largely carried on in Stockport, Denton, and elsewhere, and in which the trimmers are a class of hands closely allied in general character to the trimmers in shops and to the bonnet makers of Bedfordshire, the manufacturers have expressed no dissatisfaction with the law whatever, but, on the contrary, have worked the specific hours with great regularity. The nearer, in fact, one gets to those works in which the Textile Acts have been in operation for years, the less reluctance is there to fall into the same discipline by new occupiers and other classes of workers.

The physical condition of the hatter is that of a well developed and robust frame, living well, and enjoying his

leisure. Morally he is somewhat improved, though not yet free from habits of self-indulgence which the customs of the neighbourhood in which he resides, encourage. Generally, his condition is materially improved; and further advances in this direction are hoped for under the restrictions of the Factories Act, and their effects upon his children.

Holidays.

There have been several cases in which, holidays, varying from the strict letter of the Factory Acts, have been desired. For example, in small printers' shops, and in other shops also, where there are but few employés, annual holidays on particular days or at particular periods, are looked upon as matters of course. And even if this were not so, occasions arise, in which a holiday is desired there and then, either on account of the incident which evokes it, or the convenience to both master and worker, which it offers. So again, in larger shops, where it would be impossible without stopping the business altogether, to allow the holidays to be taken by all the employés at once, it has been found a great accommodation to permit sections of the workers to have holidays on certain days until the whole have had them. Again, where the Saturday half-holiday of the Factory Acts has interfered with borough customs, such as market days, or in cases where on Monday or Wednesday half-days could be advantageously exchanged for the Saturday half-holiday in certain small businesses, in all such cases I believe relaxations of the law have been conceded. And although there is a movement in progress amongst the people in more districts than one, to stop all associated work at 12 o'clock at noon on Saturdays, (and a useful thing too, if the duties of families on Saturday afternoon to their households, or to themselves in preparation for the next day are to be regarded in their true light,) yet there will still be trades and businesses of necessity, in which work must be carried on on the Saturday afternoon, as a consequence, indeed, of the very stoppage at 12 or 2, whichever it may be, of those large masses of the people whose wants are to be supplied after that hour. It appears to me therefore that, whenever called for, unless there is something special to object to, such relaxations should be continued.

Apprentices.

As many indentures define the hours of work per day in which the employment of apprentices may be carried on, it should be known, I think, that the Factory Act Extension Act, 1867, over-rides all such indentures, in which the hours

stated are inconsistent with the hours of work which it prescribes, up to 18 years of age. In some trades the number of apprentices is limited by trade regulations, and in others it may happen that, the trade to be taught, is necessarily one to be learnt in the night, where night work is by the Act forbidden. The re-arrangement of all such contingencies will have, therefore to be made, as may best suit the convenience of the parties concerned, since no provision is made in the Act for the enforcement or fulfilment of obligations lost or prejudiced on either side.

Night Work.

The clauses which relate to night work in the Factory Acts and Extension Acts are exceedingly important, and a right understanding of the law on this subject is so very desirable that I devote a special article to it, apologizing, however, for venturing an opinion even, on a topic so full of legal doubt as the question of what is night, excepting where it is specifically defined. In the 42 Geo. 3. c. 73. the factory day was somewhere between six a.m. and nine p.m. This, however, was by no means a good definition of night. Passing by other Factory Acts which intervened between the 42 Geo. 3. and the 3 & 4 W. 4. c. 103., in this latter it was enacted that, "no person under the age of 18 years "shall be allowed to work in the night, (that is to say,) "between the hours of half-past eight in the evening and "half-past five in the morning (except with water-power)," the words "that is to say" defining night from day, a definition which is still maintained in factory law. If these words had been limited to this statute perhaps the definition might not yet have been so clear; but they are a repetition of a previous statute, afterwards repealed, in which it was recited, "That it had become a practice to employ young "persons in factories late at night, and in many instances "all night." It then enacts that, "no person under 21 "shall be allowed to work in the night," that is to say, between the hours of half-past eight in the evening and half-past five in the morning. The first departure from this use of the word "night" is in the 13 & 14 Vict. c. 54., which in the first section limits the hours of work by day to between six and six in summer and seven and seven in winter; but by section 5. provides that when time is being recovered by water-power, work may be done in the night; and that, for such a purpose, the word "night" shall include the whole period between six o'clock p.m. and six a.m. Then follows the Bleaching and Dyeing Works Act, 23 & 24

Vict. c. 78., with which the previous Factory Acts are incorporated; but in the second section it is enacted that in recovering time lost from any cause, the day's work (*i.e.*, of six to six,) may be extended until half-past four on Saturdays, and until eight o'clock at night on other days. And by section 4, in cases of water-power, persons may be employed during the day, and the night following such day, provided that in the 24 hours they do not work more hours within the 24 than are lawful. The word "night" in the second section is however corrected in the eleventh section of the same Act by the following words:—"The time within which "a person may be employed is from six of the clock in the "morning to eight o'clock in the evening." So that still it would appear the factory night is to hold as in 3 & 4 W. 4. c. 103.

By the next Act, the Lace Act, boys of 16 may be employed between four o'clock in the morning and ten o'clock at night.

By the next Act, 25 Vict c. 8., it is recited that, it is the practice to employ females unnecessarily during the night; and it is enacted in s. 1. that it shall not be lawful to employ females, &c., during the night, that is to say, from eight in the evening to six o'clock in the morning, except to recover lost time (by water-power).

This definition of night, however, though it reduces the factory day of 1833 by half an hour morning and evening, is only applicable to persons working in the open air. It takes, in fact, all open air bleaching and dyeing works out of the Factory Acts, unless persons therein are employed before six a.m. or after eight p.m., and appears only to have reference to the general bleaching and dyeing works which preceded it, and not at all to affect any other kind of works under restriction. It cannot, therefore, be said to repeal the defining clause of day and night in s. 1, 3 & 4 W. 4. c. 103.

In the Factory Acts Extension Act, 1867, with which all that is unrepealed of the 3 & 4 W. 4. is incorporated, by the fifth temporary exception it is enacted that, under certain conditions, young persons and women may, till the 1st of June 1869, work at night. By the seventh temporary modification women may, till July 1869, be employed about blast furnaces as they were before the passing of the Act, which means, during the night.

By the 11th permanent modification, male young persons above 16 years of age may be employed under certain conditions 15 hours in one day, "between six a.m. and nine p.m.," which is half an hour into the factory night.

By the 13th permanent modification, male young persons above 16 years of age may be occasionally employed 15 hours in one day in letter-press printing, also between six a.m., and nine, ten, or eleven p.m., according to the time of commencing work in the morning. They may also be employed on alternate weeks at night between one in the morning on Monday and eleven in the evening on the succeeding Saturday, under conditions for rest and meals.

By the 14th permanent modification young persons above 14 years of age and women may be conditionally employed in bookbinding 14 hours in a day between six in the morning and eight, nine, or ten o'clock in the evening, according to the time they commenced work in the morning.

By the 17th permanent modification, in certain factories, male young persons may conditionally be employed in the night.

By the 21st and 22nd permanent modifications also, male young persons may be conditionally employed in the night.

By the Hours of Labour Regulatien Act, no child is to be employed except between six a.m. and eight at night.

No young person is to be employed except between five a.m. and nine at night.

By the 6th permanent exception, male young persons may conditionally be employed 15 hours in one day between six a.m. and nine p.m.

By the seventh permanent exception, and where water is the motive-power, male young persons may conditionally be employed throughout the night, for which purpose night shall mean between six p.m. of one day and six p.m. of the following day.

These, I believe, are all the clauses that refer to night work.

The operation of these clauses has been as follows:—

As I have said elsewhere, reading the first and second temporary modifications with the 17th permanent one, it might at first sight be thought that, as young persons, *i. e.*, males over 13 years old, may, by the latter clause, be employed in the night, so by the former, young persons of 11 and 12, might have been, for a definite period, employed in the night also; and this reading of the Act was important, inasmuch as the 17th section permits this night work to all boys employed in blast furnaces, iron mills, letter-press printers, paper mills, water-power mills, and also on any factory or class of factories certified to the Secretary of State that night work was necessary by the nature of the business. A careful reading,

however, of the exceptions, shows that all that was intended by them was that, children (not young persons) of 11 and 12 years of age might temporarily be employed full time, *i.e.*, between six and six, as in pursuance of the Factory Acts; which forbid all night work, except in recovering time by water power. Thus, in the commencement of the operation of the Act, the occupiers of most of these kinds of factories, began to employ their little children of 11 and 12 in the night, and argued strongly, and complained, as many iron masters still do, of the hardship of their not being allowed so to employ them.

There are, however, three reasons why they should not. Children require more sleep than adolescents or adults. For, first, at that period of life, the assimilating functions are most active during sleep, and causes of excitation may more easily lead to a degree of activity incompatible with health; secondly, night employment is incompatible with education; even the opportunity of the Sunday school could not be embraced by children that had been at work five or six nights out of seven; thirdly, accidents are likely to be more frequent and serious to little children when employed by night than by day. Moreover, the sleep of day in the cottage of the poor is disturbed by the activity of the household, which the utmost fatigue is incapable of entirely overcoming; and such disturbances operate eventually on the vital forces with great energy; to this, we may add also that, the perpetual occupation of the same bed by day and by night by no means contributes to health, if we are to believe the necessity of the exposure of hammocks on board ship to the influence of the open air.

In paper mills, three or four persons have availed themselves of the 5th section to employ their young persons and women at night as heretofore till the 1st day of June 1869.

In the blast furnaces of South Wales women are employed by night, which no doubt will be continued till July 1869. The nature of their employment cannot be better described, nor their moral condition be imagined, than in the evidence of one of the witnesses before the Children's Employment Commissioners, page 46, 3rd report.

William Hoffer, fitter.—"We have nine men, a girl, and generally a boy, working at the top of the furnace; the boy breaks mine. He would generally be between 12 and 15 years of age; he only works in the day. The others work night and day during alternate weeks. The girl helps me to fill the barrows. No girl under 17 should be employed at this work. They get 1*s.* 1*d.* a turn, and work seven turns one week, and eight turns the next week. When they work eight turns, they work from Sunday morning

at nine o'clock to six o'clock on Monday morning. We are obliged to work like this on Sunday to enable the hands to change from the day to the night turn. All the furnaces are worked on Sunday. There are 11 furnaces working here, and two girls and one boy to each furnace. There is no other work about the furnaces on which girls are employed."

There has, I believe, been no application for any relaxation under section 11, nor under section 13 or 14; in the former case because, for some months yet, male young persons over 16 years of age may be employed as men; and in the latter, because a variation of the usual hours to eight to eight has been found sufficient.

The 17th section is most important out of all these, because under it several applications have been made to employ male young persons of between 13 and 16 years of age at night, particularly in letter-press printing. If the preceding definition of night work be the correct one, it follows that the ordinary day work ceases at six or seven p.m.; then there must be an interval of some time during which no boy within those ages can be employed, *i.e.*, between six or seven p.m. and 8.30 p.m., and between 5.30 a.m. and six or seven a.m. also. There may be, but it appears to me there is no escape from this position. I am the less anxious about it, because I think after the 31st of March the limit of six to six will be enforced in the summer, and of seven to seven in the winter; and thus there will be no necessity for night work,—for youths at least under 16 years of age.

With respect to the 22nd modification and paper mills, for the same reasons that I have already given with reference to the health and education of boys under 16, I adhere to the non-employment of little boys in the night in these works also.

The employment of little children of eight years of age to 8 p.m. as in the Hours of Labour Act is to my mind beyond all humanity; and that of young persons and women till nine at night, is a retrocession to beyond the days of George the 3rd, without the beneficial principles of Sir Robert Peel's Act, scarcely to have been expected in 1868, side by side with the Factories Acts and their examples.

Employment of Married Women in associated Labour.

This is a subject which I admit requires handling with considerable delicacy. It is one, however, on which I have before reported, and which is worthy of the most serious consideration, since it influences so much the moral wellbeing

of so large a portion of the working classes, both within and without the walls of factories. Against the general employment of females in industrial pursuits there is nothing to be said; on the contrary, there is a good deal to be said for it, where any care at all is exercised in the shape of moral supervision over them. But in how few instances this is to be found is perhaps one of the most melancholy phases of factory employment. Every master has time to get money, but none to devote to the moral supervision of those who help him to make it. And yet none deny that long-continued employment from home, *i.e.*, from childhood to womanhood, prevents any adequate opportunity for domestic training, if the mothers were even all capable of affording it. That there are some who are so there can be no doubt; but that they are many it would be incredible to admit: and hence we trace the absenteeism from home of husbands, and the increase and success of houses and places of entertainment. It is no uncommon thing in the factory districts where high wages predominate, for very early and imprudent marriages to take place. A young man sees a weaver whom he fancies, not less for her person than for the fact that by her labour she can keep him without working; so he proposes, and is accepted. She works for the home afterwards, and he minds it. Why should he work when her wages are enough for both? Many admirable charitable institutions have been established both in England and abroad in which temporarily to receive the offspring of such marriages. When the mothers return to work, which they are obliged to do in a few days, where these exist not, or are not used, these nurslings are committed to any temporary care, and too frequently languish and die, or become diseased from improper diet. It is indeed true, that when mothers work from home, families must be neglected at home; and the voluntary extrusion of young mothers from factories and workshops, and even the limitation of married women in them, would be a national boon as well as a national gain. Mr. Bartleet, who is a manufacturer of Redditch, and an employer of female labour, expressed himself on this subject at the recent Social Science meeting at Birmingham in the following words:

"It would be admitted that if it were possible for girls and women to obtain subsistence sufficient for their wants and desires without such employment they would be in a better position; but that was not possible. The chief evils that resulted from girls being employed in factories and workshops were, 1st, the impossibility of their being trained in those domestic duties which were so essential to the proper formation of woman's character; 2nd, the risk of their being brought into the

companionship of those who were of indifferent or bad character ; 3rd, the risk of losing their feelings of modesty and purity, through being obliged to work amongst men and boys, or under immoral or irregular masters or foremen. The former could only be removed by the attention of mothers in the evenings and on the Saturday afternoons, and further by attendance at night-schools, where sewing and cutting out garments, and the study of the principles of household economy and health, were taught, in addition to the rudiments of learning. The constitutions of married women were often injured by their employment in manufactories and workshops ; and over-worked mothers could not cheerfully arrange those comforts for their husbands and children which were necessary. They did not pay due attention to the cleanliness, discipline, education, and companionship of their children. He hoped a clause would be added to the Factories and Workshops Act fixing special limits to their hours of employment. He suggested to all employers of married women the adoption of some such arrangement which has, for the last four years, been adopted in the manufactory belonging to his firm at Redditch, viz.: commencing work at 8.30, to enable them to arrange their household matters for the day, and to get their children ready and started for school ; leave for dinner at 12.30, to enable them to meet their children on their return from school, and make them neat, and to arrange for dinner comfortably before their husbands return home ; commence work again at two p.m.; leave work at 4.30, to enable them to meet their children on returning from school, and to see that they do not mix with bad companions ; to read to them in the winter, and walk with them in the summer, and also to make their home comfortable before their husbands' return home ; and also to give time for repairing clothes. Under that system (said Mr. Bartleet, in conclusion), married women could, as a rule, earn as much as if they were employed during the whole of the usual factory hours, because their improved health enabled them to work more closely, and they lost less time from ill health to themselves and their children. He hoped that girls and women employed in manufactories and workshops would derive benefit from this subject having been brought forward for consideration by this Association, and that we may not feel much longer that whilst the greatness of this country is advanced by its manufactures, the social welfare and happiness of those who are employed in connection with them is so seriously interfered with as it is at present."

We cannot fail to be at the wrong end of labour, when young mothers have to eke out the wages of husbands. When such a one, having young children at her feet, is employed from home, the life of her youngest depends very much on how soon she returns to her work after her confinement. If that takes place, as it often does, within a few days, the very work in which she is engaged renders her nursing duties dangerous to her offspring, independent of any neglect. In

the processes of agriculture and the dairy farm, absolute rest for the animal mother for some time, is essential to the well-being of the young she has produced. And so in factories; the nursling entrusted to another who has no interest in her charge beyond the weekly stipend she receives on its behalf, is more likely to perish than to survive. In vain may lecturers teach mankind how to deal with capital and labour, if, with all their teaching, women are not instructed in the art of drawing their husbands home when the business of the day is over. The task, no doubt, is difficult, neither am I prepared to say that it should be accomplished by legal measures. But it has to be accomplished; and moral feeling on the part of employers, if rightly exercised, would effect it. There is indeed no greater missionary work than that, of instructing the wives and mothers of our artizans, economy, prudence, virtue, and self-help,—none that would command a higher and more certain blessing. How useful too, it would be too, if every large manufacturer had the will and the moral courage to have a morning's reading for all their adult hands, if only for ten minutes; and how amply would it repay them in the discipline and mutual goodwill which it would effect between them and their workpeople. I had the gratification to attend such a meeting at ten minutes to 9 a.m. in the extensive works of Messrs. Fry & Co. of Bristol, at which upwards of 200 persons were present, and most of them females. Mr. Fry himself read and expounded a short chapter from the Bible. Happy the man, and happy the establishment in which such a practice is the rule.

Certifying Surgeons.

You will be aware, Sir, that it must have been necessary for me to appoint many certifying surgeons in various parts of my division, not only for the purpose of giving certificates for the persons employed in every kind of work under the Factory Act under 16 years of age as to their physical fitness for the work in which they were about to be engaged, but for the purpose of receiving reports of accidents by machinery and other causes, and of inquiring into and reporting upon their nature, so as to lead to their prevention.

As a good deal has been said by several manufacturers on this topic during the introduction of the Act, and as considerable excitement has been manifested about the "tax" which the payment of these gentlemen for their services "has imposed upon them," I must be permitted to detail

to you how any surgical visitations at all arose under the Factory Act 1833, and subsequently.

By the 3 & 4 W. 4. c. 103., 11th and 12th sect., every child, (and every person under 16,) about to be set to work, was bound to carry with it the certificate of a surgeon, testifying to its having the strength and appearance of the age it assumed to be. These certificates were given for years mostly at the residences of the surgeons, for there was then no effective Register of Births; and I lay stress upon this point as showing the practice which prevailed in most factories between the years 1833 and 1844. By the 7 Vict. c. 15. (the Act of 1844) it was enacted, that these certificates should be given nowhere but at the factory, upon personal inspection of the person named therein; and that no surgeon should examine any person for the purposes of the Act, or sign or issue any such certificate, elsewhere than at the factory where such person was about to be employed, unless for special cause to be allowed by an inspector.

As the first certifying surgeon myself, I used to give such certificates in large numbers at my own house every Saturday night.

In July 1836, whilst this system of granting certificates at the residence of the surgeon was common, Mr. Inspector Horner addressed a letter to the surgeons of his district, from which I extract the following passages.

"I consider it to be essential that the certificate should be issued by a medical man, specially appointed by the inspector for the place in which the mill is situated. The fraud to which you are so much exposed, of one child obtaining a certificate and of giving or selling it to a younger child, in the present state of the law, can in no way be so effectually prevented as by your granting certificates at the mill."

He then adds, in supplementary instructions to the same surgeons, dated September 1836—

"In my circular letter of the 6th of July I particularly pointed out the necessity of your guarding yourself against the too common fraud of an older child being substituted under a false name for a younger child, in order to obtain a certificate for the latter. My observations in my new district since the date of that letter have convinced me that there can be no effectual check against that species of fraud so long as certificates are granted at the houses of the surgeons. Except under very particular circumstances, you must grant certificates only at the mills. It will therefore be necessary for you to visit each mill once a week, and keep to that day as nearly as you can. I must leave the amount of your remuneration to be settled by a private

arrangement between you and the millowner, with this condition only, that when the certificate is to be paid for by the work-people the charge is not to exceed 6*d.* for each certificate. In Manchester, Leeds, Halifax, and several other places, the following arrangement has been very generally entered into. The mill owner agrees to secure to the surgeon the amount of the charge he usually makes for a visit in his private practice, which in Manchester is 2*s.* 6*d.* If the number of certificates at the rate of 6*d.* each be less than that sum, it must be made up, if greater the surgeon has the benefit of the surplus.

"I authorize you to state to the mill owners in your district that such as enter into an arrangement with an appointed surgeon to visit their mills once a week will be held by me free of blame, should they employ children without a certificate in the interval between the weekly visits of the surgeon, because by such an engagement they will not only be free of all charge of disobeying the law from wilful negligence, but will best secure its observances in that particular. If the mill owner decline to form such an engagement, he must be held responsible, if he employs any child, for however short a time, without first having obtained a certificate of age."

Mr. Horner explains, in a further letter dated December, 1836, what were the "particular circumstances under which certificates might be granted elsewhere than at the mills." He says—

"When mills are situated at a considerable distance from the surgeon's residence,—when only a small number are employed, and the changes are few, and adequate remuneration to the surgeon for a weekly visit may become a heavy charge upon the mill owners, they may in such cases be fairly considered as being in those "particular circumstances which will justify your granting certificates for them at your own house,"—I have had several applications from mill owners so circumstanced, and I have said that I cannot sanction the employment of children without certificates for a longer time than the interval between a weekly visit of the appointed surgeon; but that if they send the child, accompanied by a responsible person belonging to the mill, and known to the surgeon, or with a sealed letter from themselves, describing the appearance and height of the child, as a security against fraud, a certificate may be granted at the surgeon's residence."

Such then was the practice up to 1844, when the 7 Vict. was passed, and to which I am able to bear personal testimony, namely that, certificates were given at the surgeons' residences by law, but at most of the mills by choice of the mill owners, on account of the trouble and expense of sending messengers with the children, and their constantly returning without finding the surgeon at home; and such were the frauds constantly practised by parents and others in substi-

tuting older applicants for certificates for younger ones to possess them; and for these reasons it was that, after the whole question of surgeons' certificates, and the mode of obtaining them, had been entered into and thoroughly examined by a special committee of the House of Commons in 1840, by whom every question was asked respecting the mode of granting certificates, and the adoption of any better scheme with respect to ascertaining the age and physical fitness of factory workers, of divers witnesses, from among the inspectors, sub-inspectors, and from manufacturers of every class, that the law as it now stands was framed with a view of obviating all the difficulties which surrounded it.

It is true that, there remains in the eleventh section of the Act of 1844 the direction that, no surgeon shall grant any certificates elsewhere than at the factory, unless for special cause, to be allowed by the inspector; but the terms of the section are even stronger than Mr. Horner's "particular reasons" which I have quoted above, because his particular cause, namely, the mills being situated at a considerable distance from the surgeon's residence, was obviated by the 17th sect., which especially pointed to it. "Provided always, that no "occupier of any factory shall be liable to any penalty for "employing any person in any manner not contrary to the "other provisions of the Act without a surgical certificate "for any time not exceeding seven working days, or when "the certifying surgeon shall reside more than three miles "from the factory, for any time not exceeding thirteen "working days."

It is for these reasons, namely, the danger of the substitution of older children for younger, as spoken of by Mr. Horner, and the loss of time and trouble in sending children so often to the surgeon's residence without finding him at home that, passing children only at the mill is so much more certain and preferable. Possibly the register of births could be now used as to the fact of age, if all were registered, (but practically we find that many children are not), and could be countersigned for a small fee by the certifying surgeon at his residence: but, in that case the cost of both register and fee, would not be less annually, to the mill occupier, but a great deal more than, the occasional visit of the surgeon to the works, where the fact of employment and of identity of person is at once easy and capable of proof.

If we recall to mind the condition of the children physically, on which ground alone the outcry for an Act was raised at first, arising not more from the disregard of parents for their offspring than from the neglect of the employers, and that the greater mischiefs arise in the smaller factories

and workshops rather than in the larger, there can be no doubt that, without the protection of the surgeon's certificate, we should soon experience anew, the physical evils of factory work as they exhibited themselves from 1827 to 1834,—till, indeed, they demanded and obtained legislative interference. It is for these reasons, and others equally cogent, that I have steadily refused to permit certificates to be granted anywhere but at the factory, especially since the law has provided that, employment may go on for seven days without such certificate when the worker's name is on the register; and that thus time is afforded for the surgeon's visit, and for the convenience of both parties, to procure it. And it was for these experiences also, larger than those possessed by any other living remembrancer that, I regretted to see an attempt made by the 14th sect. of the Factory Act Extension Act, 1867, "to dispense with "the certificates given by the certifying surgeon, and to "substitute therefor other regulations as to proof of the "ages of children and young persons, and of their bodily "health and physical capacity for working daily for the "time allowed by the said Acts;" for I repeat that, the only other proof of age and physical fitness which the law could recognize, would be the certificate of birth countersigned by a medical examiner; and the cost of both these attestations would also be very much more expensive in every case, and very much more difficult to obtain than, the proofs which are now obtainable, including both advantages without any danger of substitution. Nay further, in my last report but one, I advocated an additional principle, which I knew would be most advantageous both to the employers and employed, namely that, once a month, the certifying surgeons should be required by the mill owner, for his own sake, and for the welfare of his hands, and for the securing to himself efficient labour, to pass through all his rooms when the workers were at work, to notice them carefully, and to point out any that were suffering from the kind of labour, or dust, or gases, to which they were exposed. Nobody can doubt but that young hands, and even old ones, sometimes need this sort of medical supervision, after being brought perhaps from the fresh air of the country, and submitted to high temperatures, lengthened confinements, and impure miasma, for weeks or months: and the profit of healthy vigorous work people, over languid ones from incipient disease or physical inability, would amply repay the extra and trivial remuneration which the certifying surgeons would require. There might possibly arise a special case which would induce me to permit a certificate to be

given at the surgeon's house; but to make a general rule to that effect, would not only be beyond my authority, but would also be productive of consequences which have been considered and condemned deliberately by Parliament, have been deprecated heretofore, and would be subversive again of the protection which the labour of little children demands, always, and under all circumstances.

There are two other points in Mr. Horner's official directions to which I am also desirous of calling your attention, inasmuch as they too, are explanatory of a practice which I have also followed out with the happiest success, and which is most advantageous to the mill owner; and being a security to the surgeon of a due remuneration for his services, enables him to discharge his duties cheaper, because in the shape of a collective rather than individual obligation. The first of these is, the exoneration by Mr. Horner in 1837, from blame, of such mill owners as have agreed to remunerate the certifying surgeon for a weeklyvisit; and the second, the grouping of small occupancies, when under the same roof, so as to have only one visit chargeable to the whole, instead of a visit to each, but with a slightly increased charge thereby on the individual certificate.

First, as to the exoneration. I have, I confess, largely followed out Mr. Horner's practice in exonerating mill owners from the consequences of employing children without certificates for longer than seven days, where they employ the certifying surgeon of the district, and have an annual contract with him for a weekly visit. There can no imputation rest upon the mill occupier after this contract, of his being desirous to employ children contrary to law, since the surgeon is bound to visit the factory within the seven days during which by the seventeenth section, 7 Vict. c. 15, the mill owner is permitted by law to employ them; and if the surgeon neglects to perform his part of the contract I have my remedy against him by dismissing him, and appointing some other person more efficient in his room. The value of the weekly visit is that, it ensures a due examination of the hands within the seven days unless some accidental circumstance prevents it; the value of the contract is that, the service is performed cheaper on account of the certainty of the remuneration, and more valuable by its amount. And it is very satisfactory to me to have been able to quote Mr. Horner's authority for this practice. Having been once in the profession, my recent proceedings in this respect have here and there been looked upon as warped or prejudiced by my early pursuits, and by a sympathy with the brotherhood. Whether these foibles

exist or not I am not bound to confess. We must look to a date long antecedent to my present office for the practice, and to its initiation, by a gentleman who could, by profession at all events, have neither such sympathies nor weaknesses. And my recommendation of this system of contracts, purely and solely to obtain for the mill occupiers lower charges by the surgeon, and by a better and safer system for them as to the risk of penalties, has been denominated by many of them a "buying off of evils,"—a compromise with power. But even, Sir, in this light I have no objection to take their interpretation of it. The evils of a determined adherence to preconceived opinions, no matter what may be the friendly counsel per contra, are well bought off if the law is not contravened; and a compromise with power is the surest harbinger of eventual peace and goodwill between the executive and the many. If it gives time only for the millowners and inspectors to understand each other, it is valuable.

It is true that these annual contracts are mainly for the larger establishments, although I have many duly signed by me as arbiter between both mill owner and surgeon, even for very small amounts. But, as Mr. Horner says, "where "hands are few and changes also, any contract that a sur- "geon would make for a weekly visit, to be remunerative "to him, would be too expensive for the manufacturer." In such other cases therefore, I have adopted Mr. Horner's other plan, of requiring the surgeon to charge only such a fee for his visit as his customary professionally, and 1*s.* for the certificate, and in a great many instances 6*d.*,—often, in the case of very poor men, nothing; and I must say, wherever I have suggested such a gift, I have never failed to meet with a most willing response from the certifying surgeons everywhere. In fact, if we take a district in which the works are crowded, great and small together, the amount of gratuitous certificates, or that which is never paid for, forms no inconsiderable item in a certifying surgeon's day's work. In many instances to which I have before alluded where mill owners are closely grouped under one roof, I have arranged that one visit shall be charged and 6*d.* a certificate all round.

But there is a class of works, in which the wildest arab boys are employed, in such a town as Birmingham, for example, or in the nail and chain districts of the black country, where they present themselves, get certified, and run away in three or four days, and others have to be obtained to fill their places, and certified, at the cost of the factory occupier, as well as to his great vexation. No plan

at present in operation seems to meet the hardship of cases like these. There are none in which the certificate is more imperatively demanded; none where it is of less permanent use. The lads working in such shops as these are the merest outlaws; boys full of every kind of vicious knowledge. And the masters! what are they? many of them quite incapable of exercising any discipline or authority over them; without education; to-day masters; to-morrow labourers again. I am afraid time only can smooth this trouble. It has attained a very considerable growth, and the insensibility of these lads to admonition and reproof is coequal with it. A few of the "wiser" heads of houses have made animadversions during the introduction of the Factory Acts Extension Act, on the manner in which the surgeons have examined the children. "They do not," they say, test them as to muscular power, or auscultate the chest, nor in the way of an examination give for their annual contracts a quid pro quo. If the manufacturers anticipated an examination of each child or young person similar to that made by a medical inspector of recruits, they must have been greatly disappointed. Any such examination would have been obviously highly improper. To an experienced eye, the presence of incipient disease, of curvatures of the bones, of scrofula, or ophthalmia, or of any important abnormal condition, would be instantly detected. Under the knowledge, too, by the parents, that no child can get admission to work who is in a state of disease, in consequence of this examination by the surgeon, cases requiring a critical examination are comparatively few; I say comparatively, for still many such are rejected annually. One might, perhaps, be permitted to ask, if a certifying surgeon, invited to pass through a factory, ventured to assert that, in his opinion, this solder was too soft, or that process of lacquer insufficient, or these blowpipes with their accumulating heat, in crowded rooms, might be widely superseded by other appliances, what would be the manufacturer's ideas, with respect to his suggestions? The answer would probably be the same in both examples.

I have addressed the following circular letter to all the certifying surgeons within my division; for it is in my opinion desirable to obtain from gentlemen possessing such abundant means as they do of eliciting it, all the information from mills, and even neighbourhoods, relative to the condition of the working classes, that can afford light or assistance to the statesman or philanthropist. In this way secret sources of disease are discovered, un-

supplied wants made known, the life of communities prolonged, and their happiness secured.

"Sir,—The copy of regulations sent you for your general guidance in the performance of your duties as a certifying surgeon, and my letter therewith, will convey to you the necessary instructions under all ordinary circumstances; but I take this opportunity of the introduction of the new Factory Extension Acts and the Labour Regulation Act, to address to you, as a medical man, a few remarks and suggestions.

"You will render a great service to the cause of factory legislation, especially in relation to its bearings upon the sanitary state of those engaged in manufacture, by collecting all information procurable, respecting the physical development, the frequency of deformity, the prevalence of disease, and particularly of special disorders, the distinctive effects of the principal kinds of labour, the average duration of life, the rate of mortality, and the prevailing causes of death among the several classes of work-people coming under your observation.

"Similar advantage will accrue from facts gathered concerning the circumstances and conditions (so far as they relate to the sanitary state of those employed) of labour in any manufacturing process coming under your cognizance; and likewise from facts regarding the moral condition, the prevalence of intoxication, and the state of education among the manufacturing classes in your district.

"This last-named information is readily obtainable by the certifying surgeon in the case of all young persons and children submitted to him for examination, whom he may question and test more or less satisfactorily respecting their knowledge of reading, writing, and arithmetic.

"Information carefully collected upon these and kindred matters coming within the scope of the certifying surgeon's functions and professional experience and knowledge will be of particular value, by contributing to form a basis for comparison in making any future estimate of the effects of factory legislation upon the material and moral well being of the working classes.

"I am,
"Sir,
"Your obedient servant,
"Robert Baker.
"H.M. Inspector of Factories."

From all the gentlemen whom I have had the honour to appoint, subject to your approval, I have received abundant proof of their eligibility to the office they have undertaken. I think I may say that, as a body, they are unequalled by any other association of medical men for public purposes. Ever ready have I found them to co-operate with me in any inquiry into the intellectual or moral training of the employés in their districts, into the means of preserving life or limb, or in effecting any results of a beneficial character either

to their own or other neighbourhoods. And I acknowledge with thankfulness the ready assistance I have received from them, since it has lightened labours which might otherwise have been too heavy for me, and for which assistance I have been too often unable to offer any corresponding advantage.

The following are the names and addresses of the surgeons appointed since my last report.

CERTIFYING SURGEONS appointed in England and Wales between 1st May and the 31st of October 1868.

Alton, near Cheadle, T. Robinson, Esq.
Barrowden, near Stamford, E. Snell, Esq.
Bicester, J. H. Croft, Esq.
Broseley, Salop, T. G. Thursfield, Esq., M.D. (vice R. Thursfield, Esq., deceased.)
Buckingham, R. Shield, Esq.
Cannock, J. C. Blackford, Esq.
Chepstow, F. G. White, Esq.
Chilcompton, A. Waugh, Esq. (vice R. H. Boodle, Esq., resigned.)
Chulmleigh, G. Percy, Esq.
Churchstanton, near Honiton, A. L. Peacock, Esq., (vice T. B. Wheaton, Esq., deceased.)
Crediton, J. A. Edwards, Esq.
Crumlin, Mon., W. J. Davies, Esq.
Culmstock, F. Morgan, Esq.
Cwm Afon, near Taibach, F. M. Russell, Esq.
Darlaston, A. Latham, Esq. (vice T. W. Ransom, Esq., deceased.)
Dawley, Salop, C. B. H. Soame, Esq.
Devizes, T. B. Anstie, Esq.
Dunsford, near Exeter, E. B. Stephens, Esq.
Fareham, G. Case, Esq. (vice W. Barnard, Esq., resigned.)
Great Torrington, C. R. Jones, Esq.
Hatherleigh, J. Gould, Esq.
Helston, J. Wearne, Esq.
Ilfracombe, F. Gardner, Esq.
Kingsbridge, J. Elliott, Esq.
Launceston, W. D. Pearce, Esq.
Leicester, C. R. Crossley, Esq.
Leigh, Lanc., G. H. Evans, Esq.
Lichfield, H. M. Morgan, Esq.
Liskeard, J. Jagoe, Esq.
Llandilo, W. Davies, Esq.
Lymington, W. R. Hill, Esq., M.D.
Maidenhead, A. Playne, Esq.

Malvern, M. G. W. Coates, Esq.
Monmouth, J. M. Woollitt, Esq.
Newbury, T. H. Hawkins, Esq.
Newent, Glo'ster, W. D. Cattle, Esq.
Pembroke Dock, G. Harries, Esq., M.D.
Penryn, G. Trenery, Esq.
Rhyl, E. Jones, Esq., M.D.
Rugby, H. W. Bucknill, Esq. (vice R. King, Esq., resigned.)
St. Blazey, W. Pace, Esq.
St. Clears, J. L. Thomas, Esq.
St. Just, A. Harvey, Esq.
Shefford, Beds., C. C. Baldwin, Esq.
Stratton, J. M. Braund, Esq.
Tenby, G. Chater, Esq.
Thrapstone, B. Spurgin, Esq.
Tredegar, G. A. Brown, Esq.
Wadebridge, I. Wilkins, Esq.
Whitchurch, H. Hemstead, Esq.
Woodbury, near Exeter, P. C. Hayman, Esq.
Ystalyfera, near Swansea, D. Thomas, Esq.

Certifying Surgeons appointed in Ireland between 1st May and 30th Sept. 1868.

Ballybay, Monaghan, L. Joyce, Esq.
Carrignavan, D. B. O'Flynn, Esq., M.D.
Galway, J. V. Browne, Esq., A.B. M.D.
Omagh, W. S. Love, Esq.
Tullamore, J Ridley, Esq., M.D.

Accidents.

Ever since the Act of 1844, when accidents occurring in factories were first directed to be reported, they have increased in number, notwithstanding all our care, and notwithstanding all the fencing of machinery which has since taken place. The introduction of new hands to factory works, their curiosity, their ignorance of the danger they run, danger which cannot be avoided by any amount of care on the part of the managers or employers, and their disobedience of orders resulting from that care, all tend to the sad mutilations which take place of fingers, and limbs, and eyes, and to the loss of lives, annually to a serious amount. We see something more of it now that it is our duty to take record of all accidents which take place in all trades. Textile works no longer stand in their sad pre-eminence of

past years. The link seen in them did but denote a chain of human suffering of which possibly there was no idea in the public mind. We do not even yet know them all, for not only are not all the accidents in factories recorded, but those that happen in workshops may be co-equal with those happening in factories, and of them we know nothing. We only are able to judge, by visits to a few of those places, how great is the probability that they out-number them.

I am surprised myself at the dens in which some of the most skilled workmen are here and there to be found working; at the dangerous nature of the access to them; at the unfenced shafting which runs within any conceivable distance of the heads and persons of the workers; at the nature of the staircases and steps without handrails they have to ascend; at the disgusting effluvia over which some of the workrooms are built; at the sumps in the middle of the yards, underground it is true, but having frequently to be cleansed; at the high-pressure boilers I now and then see under the works, or in the ground within the smallest yards, through which the workers pass and repass all day long; boilers surrounded by hundreds of inhabitants, with now and then a safety-valve open to any playfulness. Many of these are causes calculated to produce the number of accidents epitomized in the following table, for nine months in the present year, in order to bring this subject especially under your notice, and to ask for more power, if possible, to prevent, and at least materially to mitigate, the misery which is thus annually accumulating. Assuming that, the aggregate number of workers in my division is about the same in the new works of every description as it is in the textile works of every description, and I have reason to believe the difference not to be material, (excepting that in the latter a younger class of hands and more females are employed,) it will be seen that, in these nine months only, there have been more than twice as many accidents in the new as in the old; more varied, as a matter of course, and more fatal from that variety; and I am led to think that this difference arises from three or four perceptible causes.

First, from the additions which have been made to old buildings and shaftings, and from power carried by dangerous straps from one room to another, in order to cram as many people into as small a space as possible: and often, from sheer ignorance, and sometimes from an entire disregard, of the dangerous proximity of such appliances to the people employed:

Secondly, from the varied nature of the works under one roof, by which power applied to the whole at a certain speed

is released from time to time to parts only, increasing the speed in such parts, unexpectedly:

Thirdly, from the nonchalance of the workers themselves, who appear to defy danger, or to consider it so much a matter of course as to disregard it:

Fourthly, from the want of protection to main gearing and machines, which appears seldom to have been a matter of consideration. And, lastly,

From the natural curiosity of new workers, who will be perpetually exhibiting their cleverness to escape contusions and lacerations, but are eventually caught.

The reporting of the accidents in the iron districts has called forth some expression of thanks from the iron workers, as appears from the following letter:—

"Last time I saw you, you mentioned that it would be necessary, probably, to discontinue reporting the accidents. If you do so I think it will be a great evil for the workers. A careful inspection of all accidents will be one of the greatest boons to the working men. Already they are very pleased with the idea that Government is taking the trouble to look after their hurts, and in these days of grumbling that is something. Having had 30 years' experience in this parish, and having had under my care most serious accidents which have taken place here, I may mention that, since the accidents in mines have been so carefully inspected, the reduction in number has been very great. As an instance, in one colliery, before the operation of that Act, I had at one time as many as 15 pairs of splints in use. I now rarely exceed two or three pairs."

When many accidents occur in a factory, in a particular class of works, there would seem to be either a peculiarity in the machinery to produce such accidents, or a negligence of those precautions against danger by which they might be averted; and the surest way to arouse a greater vigilance amongst the occupiers of such works about them is that of the publication of them all. The great number of trades shown in the following table in which accidents have occurred within this year under my notice, shows how little impunity from danger there is in any of them. In old premises, where oftentimes leases have but a few years to run, and where alterations, possibly costly in execution, would have to be left to successors or to landlords, without compensation, I fear much can scarcely be attempted, save to ward off the most imminent dangers. Naked shafting and other main gearing in the passages to and about such works can be fenced, an extra gaslight and handrails to outside steps can be recommended, for to such sources of danger our attention is often directed, and up to this time with reasonable success. But there is a

great deal of this kind of work to do; and amidst our slow progress, the accidents continue.

In all the larger classes of works, such as iron works, much of the main gearing is on the surface, and generally exposed, and huge shafts revolve in many places that to an eye accustomed to the fencing of all line shafting on or near the ground appear very pregnant with danger. The workers, however, seem accustomed to them, and use helps them somewhat to keep out of harm's way. To burns, from heated bars, blocks, and tubes, and to the scales which fly on all sides from the surrounding anvils, an inspector or sub-inspector of factories must make up his mind to submit, as well as the workers, unless he keeps his eyes open, and a ready presence; burns, too, that are not of a slight character, and excite no sympathy. The number of such accidents that happen in the night make it most undesirable that little boys should be then employed. In August last there were 141 accidents in the iron mills and blast furnaces of my division, and of these 45 were in the night. To boys of 12 years old, two; of 13, four; of 14, four; and of between 14 and 18, five. With regard to the law touching all such accidents, and their means of avoidance, we have long had the power to require the fencing of the fly-wheel, engine, water-wheel, hoist, or mill gearing, near to which the workers are liable to pass or be employed, and machinery to be fenced under notice; but now, by the introduction of a new section, with a meaning which I admit was probably intended to limit that power rather than increase it, the Secretary of State may modify the hitherto law of fencing with respect to any factory or class of factories, upon such terms and in such manner as he thinks fit; and any regulations so modified by the said Secretary of State shall be of the same validity as if they had been the original regulations contained (not in this, but) in the Factory Acts. We shall, therefore, I dare say, find a readier method than that heretofore prescribed in the 7th of Victoria for fencing machines and main gearing, or either of them, whenever reasonable requests fail of accomplishing this desirable object.

I am led to lay more particular stress on this new section from the apathy there is amongst so many employers, either to safely fence their machinery or to compensate the sufferers; an apathy which, it is easy to foresee, will lead to the infliction of heavy penalties, or to civil actions by the sufferers against their employers, and to compensating damages. In a large carriage work to which my attention was called not long ago, a circular saw was employed to cut sections from the

centres of pieces of wood in such a way that it was scarcely possible for accidents of the severest form to be prevented, and a skilled workman had his hand nearly severed in two by it. By a very slight contrivance this sawing might have been made a self-process; but it had never suggested itself to the manager. When I told him he was liable to an action, he seemed rather surprised, and said "he would consider the matter." A compulsory maintenance of every sufferer by accidents from unprotected machinery, where it could be clearly proved there had been no negligence on their part, but a want of due forethought on the part of the employer, with pensions to families where husbands are killed by accidents preventible by appliances, would be, in my humble opinion, very salutary.

The following is a table of all the kinds of accidents, in all the kinds of works under my supervision, between the 1st of January and the 30th of September 1868, with the age and sex of the sufferer, and the result when fatal: and therein we see that, out of a population of workers amounting to 346,636 souls, the total number of accidents was 2,674; or,

The accidents to children were		·027	p. c. of the whole number of persons employed.	
„	young persons	„ ·253	„	„
„	adults	„ ·5	„	„
The total No. of accidents was		·78	p. c. „	„

I am not able to give the gross number of workers at this moment for textile and other works for the same period, but I can give that which so closely approximates to it that the difference is of no consequence. In 1862 the total number of persons employed in all textile works was 775,534, and the total number of accidents for that year was 2,673, which is equal to about one in 300; whilst in the new works it is about one in 133. Is it then that there is more carelessness among the general trades than the textile, that this great preponderance of accidents exists? or is it a proof of what the Factory Act has accomplished, in preventing them in textile works during the last six years?

Of the total number of sufferers in all the trades, new as well as textile, 488 are females, 2,301 are over 18 years of age, 1,264 are between 13 and 18, and 232 are under 13. There are 18 major amputations and 263 minor; the former referring to limbs, the latter to fingers. There are 47 cases of concussion of the brain or spinal columnos; 1,382 cases of contusions, many of them of a very severe character; 350 cases of incised wounds; 28 of dislocations;

222 of fractures major and 97 of minor; 80 of injury to the eye, mostly from the flying of the shuttle or from burns from sparks; 742 of lacerations, many of them very severe; and not less than 290 of them by cotton machinery; 527 cases of burn, of which by far the larger number took place, as might be anticipated, in the manufacture of iron, among smelters, founders, engineers, and in chemical works; 29 cases of sprain; 15 cases in which blindness supervened; and of the whole, 60 terminated fatally: or about one in 63. The proportion per cent. of accidents to workers may be suggestive of other considerations. It is, indeed, lamentable that so many accidents occur, though it may be a matter of surprise to some that they are really so few in proportion to the persons employed, amid causes of danger so various. Let us hope, however, that they may be soon still further diminished, if they cannot be altogether prevented.

Next year I hope it may be found desirable that no accidents shall be reported, unless they have occasioned a week's absence from work:—for I hear it is not uncommon in cases of slight accidents, for the injured person to throw himself on his club for three days, that he may have a three days' holiday when he might have returned to his work. The cost of reporting accidents that are trivial and inconsequential would thus be saved, as well as the trouble of a tabulation which is unnecessary.

NINE MONTHS' ACCIDENTS in the Works under the Factory Acts Extension Act, 1867, Nature of Accident, Trade in which it occurred, and Result when fatal, compared with Accidents in Textile Works during same period, January to September inclusive, 1868.

Trade.	No.	M.	F.	Ages.			Amputation.		Concussion.	Contusion.	Cut.	Dislocation.	Fracture.		Hernia.	Injury to Eyes.	Laceration.	Poison.	Run over.	Scald or Burn.	Sprain.	Sudden Death.	Suffocation.	Blindness.	Fatal.
				Over 18.	13 to 18.	Under 13.	Ma.	Min.					Ma.	Min.											
Ammunition	1	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Axles	10	10	..	7	3	..	..	..	..	6	2	..	..	..	..	..	2	..	..	..	..	..	..	..	..
Bedsteads	8	8	..	2	4	2	..	1	..	2	2	..	..	..	..	..	..	..	..	3	..	..	..	..	..
Bobbins	13	13	..	9	2	2	..	..	..	4	..	..	..	..	..	1	8	..	..	..	..	..	..	..	..
Boilers	23	23	..	18		1	..	..	..	10	2	..	3	1	..	1	5	..	..	1	..	..	..	..	1
Bolts, rivets, &c.	42	36	6	20		1	1	4	0.	19	2	1	1	..	..	1	6	..	..	7	..	..	..	..	1
Bookbinders	7	5	2	3		2	..	1	..	5	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Boots and shoes	12	11	1	3	9	..	..	1	1	6	..	..	..	..	..	..	4	..	..	..	..	..	..	..	..
Brass finishers	2	1	1	2	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..
Braziers	2	2	..	1	1	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..
Brewers	7	7	..	7	..	..	..	..	..	4	..	..	..	..	..	..	1	..	..	1	1	..	..	..	..
Bricks and tiles	12	11	1	6	6	..	1	2	..	1	5	..	..	..	..	..	1	..	..	2	..	..	..	..	1
Bridge building	1	1	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Buttons	1	..	1	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Carpet	3	3	..	..	3	..	..	..	..	1	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..
Carriages and Waggons	54	54	..	45	8	1	..	1	..	22	10	..	3	1	..	1	8	..	..	7	1	..	..	..	..

P

NINE MONTHS' ACCIDENTS in the Works under the Factory Acts Extension Act, 1867, compared with Textile Works—*continued.*

Trade.	No.	M.	F.	Ages.			Amputation.		Concussion.	Contusion.	Cut.	Dislocation.	Fracture.		Hernia.	Injury to Eyes.	Laceration.	Poison.	Run over.	Scald or Burn.	Sprain.	Sudden Death.	Suffocation.	Blindness.	Fatal.
				Over 18.	13 to 18.	Under 13.	Ma.	Min.					Ma.	Min.											
Cart-arms	1	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..
Cement	2	2	..	2	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1.
Chains	33	33	..	21	9	3	1	2	..	17	..	..	1	1	..	2	6	..	..	3	..	..	..	..	..
Chemicals	61	61	..	51	9	1	..	..	3	27	2	..	2	..	1	2	3	..	..	19	..	..	2	2	3
Clogs	1	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Clothing	11	4	7	6	5	..	..	2	1	2	..	..	1	1	..	..	4	..	..	..	..	..	..	..	..
Cocoa	1	1	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Collars	1	..	1	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Colours	5	5	..	5	..	..	1	..	..	3	..	..	..	..	..	..	..	1	..	..	..	..	..	1	1
Copper-mills	47	47	..	31	12	4	..	1	..	25	5	..	7	..	..	..	..	..	..	9	..	..	..	..	1
Electro-platers	1	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Engineers	334	334	..	242	86	6	1	24	4	157	30	5	14	11	..	10	49	..	..	25	4	..	..	5	3
Fishing-tackle	1	1	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Founders	313	313	..	216	89	8	..	17	4	147	14	..	15	3	..	14	42	..	..	54	2	..	1	1	2
Fuel	2	2	..	1	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..
Furniture	1	1	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Galvanizers	4	4	..	3	1	..	..	..	..	2	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..

NINE MONTHS' ACCIDENTS in the Works under the Factory Acts Extension Act, 1867, compared with Textile Works—*continued.*

Trade.	No.	M.	F.	Ages.			Amputation.		Concussion.	Contusion.	Cut.	Dislocation.	Fracture.		Hernia.	Injury to Eyes.	Laceration.	Poison.	Run over.	Scald or Burn.	Sprain.	Sudden Death.	Suffocation.	Blindness.	Fatal.
				Over 18.	13 to 18.	Under 13.	Ma.	Min.					Ma.	Min.											
Gas	1	1	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Gates and hurdles	8	7	1	5	2	1	..	1	..	..	1	..	..	1	..	1	3	..	..	1	..	..	..	..	..
Gelatine	2	2	..	1	1	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Glass	142	139	3	114	23	5	..	..	..	44	73	..	6	1	1	1	5	..	..	10	1	..	..	1	1
Gold-thread	1	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Grinders and polishers	4	1	3	2	2	..	..	1	..	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Guns and pistols	2	2	..	1	1	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Hats and caps	6	4	2	2	3	1	..	..	..	..	1	..	1	..	..	..	4	..	..	..	..	..	..	..	..
Hollow-ware	4	4	..	..	4	..	..	1	..	2	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..
Horse shoes and tips	1	..	1	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
India-rubber	2	..	2	1	1	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Iron manufacturers	861	858	3	592	247	22	1	32	5	320	73	8	36	19	3	14	70	..	1	267	10	1	1	1	23
Iron-washer do.	5	1	4	3	2	..	..	..	..	2	..	..	..	..	..	..	3	..	..	..	..	..	..	..	..
Japanners	2	2	..	1	1	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..
Lamps	1	1	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Lead	9	9	..	9	..	..	..	..	1	3	2	..	1	..	..	..	1	..	..	1	..	..	..	..	..
Leather	2	2	..	2	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..

NINE MONTHS' ACCIDENTS in the Works under the Factory Acts Extension Act, 1867, compared with Textile Works—*continued.*

Trade.	No.	M.	F.	Ages.			Amputation.		Concussion.	Contusion.	Cut.	Dislocation.	Fracture.		Hernia.	Injury to Eyes.	Laceration.	Poison.	Run over.	Scald or Burn.	Sprain.	Sudden Death.	Suffocation.	Blindness.	Fatal.
				Over 18.	13 to 18.	Under 13.	Ma.	Min.					Ma.	Min.											
Locks and keys	4	4	..	2	1	1	..	2	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Manure	1	1	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Metal-rolling	19	19	..	11	8	..	..	..	..	7	5	..	..	..	..	..	4	..	..	3	..	..	..	..	..
Nails	44	43	1	13	21	10	..	..	..	20	7	..	..	..	..	3	12	..	..	2	..	..	..	1	1
Needles	5	5	..	3	1	1	..	..	1	..	2	..	..	..	..	..	..	..	..	2	..	..	..	..	1
Oil	2	2	..	1	1	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Paper	71	56	15	23	37	11	..	8	1	28	10	2	7	1	..	..	9	..	..	3	2	..	..	..	2
Pottery	13	12	1	6	7	..	1	3	1	4	2	..	..	..	..	..	1	..	..	1	..	..	..	..	..
Printers	28	27	1	2	22	4	..	1	1	9	4	..	4	..	..	2	7	..	..	..	..	..	..	..	..
Quarries	1	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Rails	21	20	1	18	3	..	..	1	..	9	1	..	3	1	..	..	3	..	..	3	..	..	..	..	1
Rope	19	16	3	6	12	1	..	3	..	6	2	..	4	..	..	..	4	..	..	..	..	..	..	..	1
Safe	2	2	..	2	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..
Salt	19	19	..	12	6	1	..	1	1	9	1	..	1	..	..	..	..	..	..	5	1	..	..	..	1
Saw-mills	12	12	..	7	5	..	..	2	1	3	2	..	..	1	..	..	2	..	..	1	..	..	..	..	..
Ships and boats	118	118	..	88	28	2	..	2	4	52	12	1	14	2	..	3	18	..	..	8	2	..	..	..	..
Smelters	115	115	..	95	18	2	1	1	1	43	9	1	6	2	..	3	9	..	..	38	1	..	..	1	2

NINE MONTHS' ACCIDENTS in the Works under the Factory Acts Extension Act, 1867, compared with Textile Works—*continued.*

Trade.	No.	M.	F.	Ages.			Amputation.		Concussion.	Contusion.	Cut.	Dislocation.	Fracture.		Hernia.	Injury to Eyes.	Laceration.	Poison.	Run over.	Scald or Burn.	Sprain.	Sudden Death.	Suffocation.	Blindness.	Fatal.
				Over 18.	13 to 18.	Under 13.	Ma.	Min.					Ma.	Min.											
Smiths	4	4	..	4	..	..	..	..	..	1	2	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Spades	2	2	..	1	1	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Spirits	1	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1
Springs	3	3	..	1	2	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..
Stampers and piercers	1	1	..	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Starch	1	1	..	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Steel pens	7	1	6	1	6	..	..	..	..	6	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..
Sugar refining	22	21	1	21	1	..	..	..	2	5	3	1	2	2	..	..	..	..	..	7	..	..	..	..	1
Tobacco	3	3	..	1	2	..	..	..	..	..	..	..	1	..	..	..	1	..	..	1	..	..	..	..	..
Tools	14	14	..	5	9	..	..	..	1	4	1	..	..	..	..	1	6	..	..	1	..	..	..	..	1
Tubes	37	37	..	15	20	2	..	1	..	22	4	..	4	..	..	..	2	..	..	4	..	..	..	..	..
Umbrellas	4	4	..	..	3	1	..	..	..	1	..	..	..	..	..	..	2	..	..	1	..	..	..	..	..
Varnish	1	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..
Wheels	7	7	..	6	1	..	..	..	..	3	..	1	1	..	..	1	1	..	..	..	..	..	..	..	..
Wire	3	3	..	1	2	..	..	..	..	..	1	..	..	..	..	..	2	..	..	..	..	..	..	..	..
Total	2,674	2,605	69	1,787	790	97	9	118	34	1,086	298	22	141	48	5	64	317	1	1	499	26	1	4	12	50

NINE MONTHS' ACCIDENTS in the Works under the Factory Acts Extension Act, 1867, compared with Textile Works—*continued.*

Trade.	No.	M.	F.	Ages.			Amputation.		Concussion.	Contusion.	Cut.	Dislocation.	Fracture.		Hernia.	Injury to Eyes.	Laceration.	Poison.	Run over.	Scald or Burn.	Sprain.	Sudden Death.	Suffocation.	Blindness.	Fatal.
				Over 18.	13 to 18.	Under 13.	Ma.	Min.					Ma.	Min.											
Bleach and dye works -	39	39	..	18	17	4	..	2	2	14	1	1	7	1	..	..	4	..	..	7	..	..	..	..	1
Cotton - - -	741	446	295	345	285	111	7	90	7	203	35	2	45	36	..	11	290	..	..	12	3	..	..	1	7
Flax and jute - -	204	111	93	86	106	12	2	37	..	35	7	2	17	9	..	3	88	..	..	4	..	..	..	2	1
Hosiery - - -	2	2	..	1	1	..	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Lace - - - -	8	8	..	4	3	1	..	..	..	3	..	..	1	..	..	..	..	..	..	4	..	..	..	..	..
Silk - - -	17	11	6	9	8	..	..	2	..	5	3	1	1	..	..	..	5	..	..	..	..	..	..	..	..
Woollen - - -	92	77	15	46	41	5	..	11	2	27	6	..	6	3	..	2	35	..	..	..	..	..	..	5	..
Worsted - - -	20	10	10	5	13	2	..	2	2	9	..	..	3	..	..	..	3	..	..	1	..	..	..	..	1
Total - -	1,123	704	419	514	474	135	9	145	13	296	52	6	81	49	..	16	425	..	..	28	3	..	..	3	10
Works under Factory Acts Extension Act, 1867 - - -	2,674	2,605	69	1,787	790	97	9	118	34	1,086	298	22	141	48	5	64	317	1	1	499	26	1	4	12	50
Textile works - -	1,123	704	419	514	474	135	9	145	13	296	52	6	81	49	..	16	425	..	..	28	3	..	..	3	10
Grand Total -	3,797	3,309	488	2,301	1,264	232	18	263	47	1,382	350	28	222	97	5	80	742	1	1	527	29	1	4	15	60

Factory Schools.

By the term "factory schools" I do not refer to schools scattered here and there, in which children employed within certain premises are collected and taught, but to a class of schools erected by the manufacturers, primarily, for their factory children, secondly, for the children of their workers, and thirdly, for those of the neighbourhood around the works themselves.

The subject is one of course of great interest: for when one looks back to the fact, as detailed by Mr. Henry Ashworth, in the 6th volume of the Reports on the Paris Universal Exhibition that, in 1825 "the idea of a day "school becoming appurtenant to mills and works had only "been heard of at Mr. Owen's Lanark Mills in Scotland," that, then, the working classes were for the most part untaught, and that, their education was deemed an experiment of doubtful if not of dangerous tendency, and when one compares this, with the tabulated statement herein-after presented, of existing schools "appurtenant to mills and works," every sincere friend of the working-classes must be surprised and delighted at the great expense so many firms have gone to in erecting and supporting schools of so important a character.

Whoever will take the trouble of examining the accompanying table will find that one firm at least had adopted the suggestion of the first Sir Robert Peel in 1802, of educating their workpeople: and had established a school upon their premises five years previously to the Factory Act of 1833: and that others followed their example in fairly rapidly succession. Thus, of the 27 schools that have favoured me with returns,

1	has been established	40 years.
2	„ „	33 „
1	„ „	32 „
6	„ „	between 20 and 30 years.
9	„ „	„ 10 „ 20 „
1	„ „	„ 5 „ 10 „
4	„ „	under 5 years.

In three the years are not given:

a convincing proof of the imperative obligation forced upon these large employers of labour, to educate their workpeople: and a silent reproach to those, who have been in the habit of shrinking from this duty when legally called upon to fulfil it.

If we examine Mr. Ashworth's opinions upon this obligation, he, at the time he penned them, being a large cotton

manufacturer in the neighbourhood of Bolton-le-Moors, we shall find in them, no doubt, the actuating motives of the whole of these proprietors in the educational establishments they have formed.

"Misgivings," says he, "were not unfrequently expressed, that the zeal and expenditure thus being incurred by Messrs. Ashworth (that is, on the school and annual cost of education) might one day be turned to their own annoyance and pecuniary loss. In one instance only did this prognostication ever appear to have become verified. A young man of considerable talent, who, when a child, had been removed to the factory from a neighbouring workhouse, had made rapid progress at school, especially in arithmetic, and when a strike of the workpeople happened to take place in 1830, he became very officious as a leader. The strike, however, was defeated by the employment of new hands; and it was attributed to him, or through his influence, that the new hands were brutally assailed at midnight by an infuriated mob: and by way of termination of their riotous proceedings this assemblage demolished the windows of the school."

Happily however, though,

"the proprietors might naturally feel deep mortification at the exhibition of such a resentful spirit, they could not conceive of any other means more effectual than that of schooling, for the removal of such ignorant infatuation; so they had the damages repaired, and endeavoured to increase the efficiency of the teaching. The continued extension of the works, and increase of the population, afterwards necessitated the enlargement of the school accommodation; and, when this was being provided, suitable arrangements were also made for news-room, lecture-room, and library, and for the performance of divine worship."

And whilst I am quoting from these gentlemen's experiences in years, commencing with 1825, let me not lose the opportunity of stating the results of this forbearance and large-heartedness, as shown in their report to the Paris Commission in 1868. "Many of the parents," he adds, "have "expressed how much gratification they have felt that, by the "advantage of the education and training thus derived to "the young, they had become so completely separated from "the corrupt influences of music saloons and drink shops.... "Cases of illegitimacy have been scarce, and during the whole "period, there has not been any prosecution for theft.... "The proficiency of many of the workpeople has enabled "them to rise from the ranks of labour to become ma-"nagers. About 30 of these have been reckoned, on the "spur of the moment. And 10 of them have become business "partners or proprietors of mills." And the report is closed with this sentence: "The proprietor is cheered in the con-

" sciousness of having endeavoured to promote the welfare " of those he has employed, and is rejoiced in the attendant " success."

From the inquiries which I have recently made on a form printed for the purpose, and from the replies received, I find that the average cost of building 20 of the schools (the other seven making no return of this item) was 1,948*l.*, and that of the whole number only two received aid from the Government grant for that purpose. This is indeed exceedingly satisfactory, because nearly all of them are really National or British schools, being freely open to all the children of their respective neighbourhoods. Two of the schools are very fine groups of buildings, costing their proprietors 6,000*l.* or more; one of them being regularly used as a church on Sundays; one other cost 3,000*l.*, and 13 have cost between 1,000*l.* and 3,000*l.*

It is interesting to note, too, that the increase of this class of schools connected with manufacturing establishments very fairly represents the increase in all the other sorts of day schools within the same period. It may be also remarked, that the proportion of schools built in this way was larger between 10 and 20 years ago than it has been since.

To my inquiry, whether parents employed by the various firms are at perfect liberty to send their children or not to the schools established by these firms, the answer is uniform that they are. But there are of course exceptions in the case of half-timers, who are in some cases compelled to attend the schools of their employers; and in the case of one eminent firm, who have found upon examination a large number of youths in their employment below a fair standard of elementary knowledge, they have established a special school for their instruction; and insist upon their attending it three half-days a week, under pain of a small fine for non-attendance. These youths, it should be added, have a large share of leisure during the daytime at their disposal. The table shows also that in two cases only, have attempts been made to levy a small tax upon workmen's wages for the purposes of education. Both places are in Wales. One has abandoned the principle; the other deducts 2½*d.* in the pound from the workmen; a practice which has been in operation for 18 years. On this latter point, it is so extremely desirable that further information should be obtained (for I think I have heard that elsewhere in England this principle has been found to answer very well) that I should be glad to receive any communication on the subject, which employers or others may be disposed to send me.

Of 23 schools which answer the inquiry whether any pre-

ference is given to children who are educated in the schools, either upon vacancies occurring in the factories or in cases of subsequent promotion, eight replied in the affirmative, and this plan cannot fail to have a most beneficial influence on the scholars. Scholars are required to pay school fees in all the schools. These fees vary from 1*d.* to 4*d.* a week. A few pay 6*d.* Six schools charge higher fees to other people than their own workpeople; but there are cases where the children of people who have died whilst in the service of the firms, or have been disabled at work, are received as free scholars. 17 boys' and 16 girls' schools, receive half-timers, numbering about 1,400 yearly, and about equally as to the sexes. 12 of the schools provide for every instruction, the fees varying from 1*d.* to 6*d.* a week. These most important means for the maintenance and prmotion of education amongst our young workpeople can scarcely be over-rated; and I am glad to be able to bear the most unequivocal testimony to their value, from the experience which I have gained in various parts of my district, but especially in South Staffordshire, where there are some of the best night schools also in the country in connexion with some of its largest manufactories, and where the wishes and exertions of employers and the friends of education are supplemented in a most valuable manner by the South Staffordshire educational association, of which Mr. Talbot, one of the ablest and most zealous schoolmasters in the district, is the secretary. This association, from its establishment many years ago, has been most ably presided over by Lord Lyttelton, whose name, when I mention it, is a guarantee for everything that can be anticipated from an association for such purposes.

It is a subject of especial gratification to me to quote from their report, read at the ninth annual meeting of this association, and conference in connexion with it, that, "notwithstanding many discouragements and many temptations, the night school managers and teachers are carrying them on with a large degree of general success, improving thousands of youths in their elementary and general knowledge, and training them to habits of diligence, punctuality, and good order;" and more especially as follows:—"And they (the committee) venture to suggest, as they have before suggested, to all employers of juvenile labour in the district, the immense service which they may render to the cause of evening school examination by adopting the plan of an annual examination of the young persons in their employment, and of thereby partially demonstrating to them the great need of improving their education. This is already done, with most excellent effect, in one at least

" of the largest establishments in this district, and could be " carried out in a most easy and inexpensive manner " through the medium of this association."

I hear that an appeal is to be issued to employers, urging upon them this same suggestion, and to this course I beg to add my earnest recommendation. The simple test of an annual examination of all the young people in an establishment, in reading, writing, spelling, and arithmetic, will certainly reveal, both to employers and to the young people themselves, what perhaps very few adequately know of the state of education amongst the employés: and cannot fail to stimulate them in the desire for improvement. I could not instance this better, perhaps, than by a report of the Granville Works, Birmingham, from whence the following was issued by the employers in February 1868 :—

" To our workpeople.—The inquiries we have been obliged to make in order to obtain the information necessary to be given in compliance with the Factory Acts, recently come into operation, have revealed a want of education amongst the 'young persons' in our employ truly lamentable, and for which we certainly were not prepared. On the 17th of December last we had 95 young persons under 18 years of age working in these works. Of these, 23 returned themselves, in answer to our inquiries, as being able to read and write, and nine as being able to read only, leaving 63, or two-thirds of the entire number, as not being able to do either the one or the other. That this state of things in the present day is discreditable, and ought to be altered, will, we think, be admitted by you all ; and it presses itself with considerable force upon our own minds. We have always endeavoured, as far as in us lay, to carry on our business in such a way as that the employment we are able to give should be beneficial to our workpeople ; and, in fact, as far as possible, to act in sympathy and accord with them. We are persuaded that if we are to meet and keep our place against, not only the competition and industry of our own countrymen, but also against that of the intelligent and wide-awake foreigner, the union between workpeople and employers in time to come must be still more firm, and the understanding even more complete. That such union and good understanding will be greatly retarded by ignorance, and immensely advanced, to the benefit of both parties, by a proper state of education, must, we are sure, be as apparent to you all as it is to us. To do our part, therefore, as employers, in securing to all our 'young persons' the means and benefits of at least primary or elementary education, we have made arrangements to commence a factory night school on the 2d of next month. We have engaged the services of an intelligent and able headmaster, who has for some years been at work in a National school under Government inspection, and who has during the latter part of the time had the sole charge of a large night school. We are fitting up part of the large room over the bath-maker's shop as a school-

room, and shall supply the necessary working apparatus, and such assistance as from time to time may be found necessary. We shall expect, and, indeed, require, the attendance of all 'young persons' employed here under 18 years of age, who do not prove to our satisfaction that they can read and write. The first and greatest attention will be paid to elementary subjects, viz., reading, writing, and arithmetic; but our object being to make the school as perfect as possible, higher subjects, such as grammar, geography, and history, will be taught as soon and as much as practicable. We refer you to the printed rules for further information, and rely upon your earnest co-operation.

"S. H. Hopkins & Sons."

This circular was progress in the right direction. It exhibits too, admirably, the latent effects of the Factory Act upon the public mind; I mean the power, to call to the memories of kind-hearted and well-intentioned employers the imperative obligation which Providence has laid upon them to educate their workpeople; the conviction that that obligation, in a commercial point of view, is absolute; and that masters ought to expect, and as a principle to require, of their workpeople, the faculty of reading, writing, and arithmetic at least, and to aid them in attaining higher branches of education afterwards.

You would possibly, sir, like to know the result of this experiment of Messrs. Hopkins and Sons, and what became of their attempt to enforce education on those who entered voluntarily to the obligation of learning as the price of employment; and it is given in the following letter and report, dated 17th October 1868:—

"Dear sir,—In compliance with your letter of the 13th instant, we have the pleasure to enclose you our superintendent teacher's report of our night school. We should think it scarcely leaves us any thing to remark upon. We regret the attendance is not more considerable; but this is a drawback incident to all night schools, but we never relax in our endeavours to counteract it. The superintendent is decidedly efficient in the conduct of the school. He has with him five salaried assistant teachers, three of whom are clerks in our warehouse. At Midsummer we distributed 21 prizes for good conduct and regular attendance, and purpose holding an examination at Christmas. We enclose a copy of the prayers we have adopted for the use of the school.

"'Report.—In presenting you a report of progress made in the night school, I beg to submit the following statistics. There have been received into the school 127 young persons, of whom there have been 58 girls and 69 boys. At the present time there are only 73 in attendance; 32 females and 41 males. Of the 73, 56 have been in attendance from the opening of the school on the 16th of March last. The number of attendances possible to have been made by these is 92. The average attendance is 50; but as 11

of these have only attended a few weeks, the average by the 62 will be 57. In speaking of progress, I believe I am justified in saying that it is marked one way or other in each class in the following manner :—Boys: A. Reading and arithmetic improved, dictation improved, many careless in writing. B. Improvements have been made in each subject, writing and arithmetic more especially; several make no effort to improve, and will not learn their tables. C. Several in this class have been improved considerably, having respect to their very low attainments.—Girls : A. Improvements are to be traced in each subject, reading most. B. The same. C. Some progress. Scarcely more than one knew their letters on admission. Behaviour during prayers, good; during work, not good. When they are accustomed to discipline improvements will become more apparent. Many appear very fond of music, and would like it in place of some other lesson. I have given an occasional reading, which interests many, but sends too many in their wearied state to sleep.

" 'Jas. Stelleard.' "

But the example of Messrs. Hopkins and Sons is by no means isolated. I have to cite also that of Messrs. Chance, Brothers, of Smethwick, which indeed I should have first quoted, who in November 1867 issued the following notice to their workpeople :—

" Glass-works, November 1867.

" An examination of the boys, girls, and young persons employed in the various departments of our glass-works shows that many of them of both sexes do not possess that knowledge of the rudiments of education which every person, at least in this neighbourhood, who is old enough to work, ought by this time to have acquired. We have therefore resolved in future to discountenance the employment of boys and girls in our works who do not possess at the time of seeking employment a fair acquaintance with elements of reading, writing, and arithmetic, with the addition of freehand drawing for the ornamental department; and to open an additional day school for glass-house boys, and an additional evening school for girls and young women. In the case of glass-house boys, who have at their disposal a great deal of leisure time, we expect all of them under 18 years of age to attend the day school at least three times each week for the present; and in the case of all other young persons of both sexes, whose elementary education is defective, we expect the boys to attend the evening school three times in each week for at least six months in the year, and girls and young women for such longer period as may appear to us to be desirable.

" It is our purpose to impose a fine of 6*d.* per week upon glass-house boys who absent themselves from school without sufficient cause ; and not longer to employ any whose conduct is reported by the master to be bad, or where attendance is not kept up with regularity.

" We purpose to hold an examination of all our young people

from time to time, and to institute a system of rewards for those whose attendance, good conduct, and progress merit such distinctions.

"We shall be glad to find our intentions in this matter fully appreciated by those whose welfare is to be thereby affected, and to know that those whose education is in a satisfactory condition will still give a regular attendance on the schools and classes, both for the sake of their own progress, and as an example to those whose education is not in so satisfactory a state.

"CHANCE, Brothers, & Co."

"This rule on the whole has worked very well," says Mr. Talbot, under date October 14, 1868. "There have been some fines enforced for non-attendance, but no dismissal. The boys, with one exception, are getting to like the school, and their conduct has improved in a very satisfactory manner. The night school has opened for the season, and is attended voluntarily by about 130 boys, who work from six to six. In the case of these boys there are no fines, and there has been no dismissal at any time. The rule requiring attendance for them is not insisted upon, yet they attend very nicely indeed, from their own desire to improve, aided, no doubt, by the fact that the masters take an interest in their progress."

I look, as I have often said, upon evening schools as a necessity. History has repeated itself within 30 years. The time was when there were comparatively no schools but Sunday schools for the factory worker, and no night schools, for the best of all reasons that the workers had no time to devote to them. Now, night schools and institutes seem destined to arrest ignorance in adolescent life; and therefore I trust to see them increasing every year in number and efficiency. Take for another example the following statistics of fustian cutters at Cadishead, and say whether night schools are necessary or not. "There are 157 cutters between the "ages of 11 and 18 years, of whom 30 can read and write "well, 50 imperfectly, 47 can read only, and 30 cannot do "either. There are 122 between 18 and 30, of whom "21 can read and write well, 30 imperfectly, 27 can read "only, and 44 cannot do either. There are 47 between "30 and 50 years of age, of whom seven can read and write "well, five imperfectly, 16 can read only, and 19 cannot "do either."

Let me not forget the argument advanced by many, who do not thoroughly understand how a change of occupation for the mind is rest, a rest greater in many instances, and far more beneficial, than absolute quietude, and also by those, who are reluctant to contribute towards the support of education among young persons, "who have, "they say, worked hard all the day, and are unfitted for

" the further strain on their physical power by attendance " at the night school." Nothing can be more fallacious, as a rule. There are trades and cases in which it is so; but the general way in which the youths of both sexes employ their leisure after work is over, and which is a matter of universal acknowledgment and observation, denies this want of physical power, but admits the need of a directing power over such persons, like that which Messrs. Chance, Brothers, and Co., and Messrs. Hopkins and Co., give and enforce. And this directing power, used with the gentle but cautious hand, as in the case of both these firms, brings into play a discipline which the law has never ventured to entertain, much less enforce, towards persons above 13 years of age, but which is the sheet anchor of a useful application of that which has been learned before the later restraint begins.

Where there is no night school in the neighbourhood of small manufactories, I should recommend the employers to unite in applying for one to be opened in some neighbouring schoolroom, under the inspection of the Privy Council; and to guarantee the remuneration of a teacher for the first two or three years, until the school should become, as it ought by that time, nearly or quite self-supporting. I look back with considerable pleasure to the day when I was told in Longton, in Staffordshire, that there was no schoolroom to be had for the many children about to be educated compulsorily by the law, nor anybody willing or interested enough in the subject to build one, when, aided by that most zealous of all working clergymen, the rector, we together found a dissenting school unoccupied, rented a room in it for 25*l.* a year, which I guaranteed from my factory fine fund, obtained a first-rate master from the training school at Yule, and now, there are upwards of 300 boys under tuition in that and an additional room under the same roof, than which nothing can be more satisfactory. And so it might be with regard to night schools for older boys and girls. It only requires the obligation of educating their workers to be felt by employers, then occasional visitation at the homes of the people by the middle and upper classes, to show them why the schools have been established, and the advantages, moral and social, of education, and the most beneficial results would accrue. I have long since arrived at this conclusion, and have reported upon it; indeed it was one of my corollaries on schools and scholars in 1863 that, children of 13, when passing from short time to full, should undergo, by the school master or mistress they are leaving, some examination as to whether

a certain maximum amount of education has been then attained; and if not, though full time work should be legally permitted, a further attendance, limited to 16 years of age, should be required at a night school, if there was one within a reasonable distance, till the maximum was acquired; and I have seen no reason since then to alter this opinion.

Such a transition from the day to the night school, without mulcting wages, or interfering with the liberty of labour, would be what is needed amongst the working classes towards rendering their education so far complete.

To return, however, to my statistics, it will be seen that in 57 separate schools boys, girls, and infants, but excluding infant schools, the average attendance is about 107. The annual cost to the managers of 74 establishments, including in most cases three schools, and also the evening schools, is on the average 109*l.* In 12 schools, parents purchase their children's books and other requisites. 22 schools out of the 27 have certificated teachers, and I suppose, therefore, that they are under Government inspection, and receive the annual grants upon examination. These are all exceedingly valuable facts to have ascertained. My regret is that the returns are not more complete; for there must be many others of a like character that I have not known, and therefore could not hand them the forms; and there must be some that had forms, and have neglected to return them. What I have received, and doubtless what I might have received, do and would have borne most abundant testimony that the want of education is not forgotten by some of the larger employers of labour, nor, very much to their credit, by some of the smaller.

And now for a few moments I will,—not draw a comparison between the industrial districts of France in the matter of factory education, and our own, for it is too charming to see them each striving in this race of excellence, but simply place side by side with the table I have here introduced and its analysis, an extract from the address of M. Engel Dollfus, of the firm of Dollfus, Mieg, and Co., of Mulhouse, Haut Rhin, to the "Société des Bibliothèques Communales," in September 1867, assuring you that, every moral and educational effort, suggested and carried into effect by this firm, one of the most important in France, springs from the purest and most patriotic motives.

"I should have wished," says Mons. Dollfus, "at our fifth general assembly, to have been able to lay before you a satisfactory account of the progress made since our last meeting.

Unfortunately we have not been an exception to the common lot. The trade crisis under which all have suffered more or less, has not spared us. We ceased to make progress from the moment even when our society received from the jury of the Exhibition for itself and its promoter, medals intended to consecrate its success, and the souvenirs of common efforts. This is often the course of things. First there is a certain enthusiasm and almost infatuation, which is the period of initiation and getting into order. Then comes that of serious labour and propagation, to which you have devoted three well spent years, for you have thousands of readers who have been pleased with and have profited by, the excellent resources of instruction and amusement placed within their reach. At present there is a lull; a slight indifference even amongst the zealous promoters of our society. I do not know, indeed, any budding society which has not passed through this stage.

"Have we been stopped by opposition, or by any distrust caused by party feeling? Shall we henceforth come in contact with authorities less favourable to the idea of progress attached to our work; or is it that we ourselves, absorbed by the Exhibition, or by the sad state of affairs, have been less active at the very time when it was needful to redouble our efforts? There is all this in our situation; and I will add in all sincerity, and to the interest of the societies of librarians, our jurors, that there is danger in occupying oneself only with books. It easily engenders a certain languishing monotony, which must be resisted with vigour, if one wishes to escape becoming benumbed. This object can be obtained by very simple means. Your committee has stopped at it, and your secretary, who knows so well how to render things attractive which are not naturally so, has much wished to speak to you of it with some explanation, before I submitted it to your consideration. Seek to multiply the number of readers, after having, as you already have done, scattered in profusion the materials for reading itself; for this is only in reality the completion of the object you have in view, namely, always to labour for the diffusion of knowledge the most appropriate to the purpose of elevating the moral and material condition of our working classes. My opinion is that to serve a cause, one must possess the courage to present it in its true light, withdrawing accessory considerations of selflove or interest.

"You know that our department holds high rank among the official statistics of primary instruction. Thus in 1865 it figured in the ninth rank out of 86 departments. In the list of departments classed by the number of married people with a total of 100 who signed the act of their marriage between 1858 and 1860, the Haut Rhin is classed the sixth, with 96 per cent. If from these we pass to the classification of the departments by the number of conscripts knowing how to read only, we find the Haut Rhin in the eleventh rank, with 91½ per cent. We are still better classed on other heads. Thus, in the table of the

number of pupils frequenting the schools in relation to the population, we occupy the seventh rank, with 16½ per cent. pupils to 100 inhabitants, the mean of the whole of France being 12·6 per cent. in 1863, the double of what it was in 1839. Let us add to this, that neither in the Haut Rhin nor Bas Rhin is there a single communal without a school. You will thus perceive, that we occupy alternately the ninth, sixth, and eleventh rank, always amongst the first of the 86 departments of which France is composed, classed according to their degree of instruction.

"This is, indeed, a cause of congratulation. I would, however, still add one thing, which is, that you should not forget the greater part of the border countries are better instructed than ours, and, that a portion of from 10 to 20 per cent. of ignorant people still offers a fine margin for the friends of education.

"Next, let us examine more closely the official statistics, and let us try to draw from them a lesson. We have already seen that, in the Haut Rhin, 16 per cent. of the inhabitants attend school. If we apply this proportion to the 60,000 inhabitants of Mulhouse, we ought to arrive at a school population of 9,000 children, or, in adding to the 3,600 children in our primary schools all those who receive primary instruction at college, at the professional schools, free schools, and factory shools, we shall still be infinitely below this figure. Many more schools are still necessary, notwithstanding the progress already made.

"I feel some hesitation in quoting to you new figures; but it is necessary, if I am to set before you a sketch, true or exact in every point; and the experiment is one which can be made in a few hours in each establishment. In 1848 I endeavoured to ascertain the number of workmen of Dollfus, Mieg, & Co., who could read and write, that could read only, or that could neither read nor write. Here is the detail of the work repeated in 1858 and 1864:—

Year.	Number of Workers.	Read and write.	Read only.	Neither read nor write.
1848	1,655	1,144	61	450
1858	2,449	1,588	214	647
1864	2,271	1,553	117	601

"This gives a proportion of illiterate persons equal to 27 per cent., of 26½ per cent., and 26½ per cent., the invariable and melancholy average extending over 16 years, it is true, over men, women, and children of as low as eight years of age, but not the less melancholy for all that.

"To begin with these periods of 1845, 1858, and 1864, in order to appreciate approximately the degree of instruction of our working population in general, appeared to me to be neither hazardous nor exorbitant. The two last periods show from 2,300 to 2,400 workpeople; and we must take into consideration the influence which an incessant immigration of workpeople, for the most part illiterate, exercises on the men, in expressing the degree of general instruction; but which, apart from that, has a high signification.

"Here are still more facts. The result of the census of 1866 and 1867 shows that the establishments of Mulhouse employ about 700 children from 8 to 12 years of age, and that only 200 of these children work in our establishments of Dollfus, Meig, and Co., at Mulhouse and Dornach; and I was desirous to find out how many among them could neither read nor write, although they had attended and still did attend school; and the following are the proportions:—

"In the spinning departments there were 46 per cent. illiterate, in the printing 65 per cent., and in the general labour of the establishment 57 per cent.

"The figures I have thus quoted to you express too eloquently the immensity of the task to be accomplished, and the utility of units to accomplish it, whose aim will always be expressed in two words, instruction and morality."

M. Dollfus adds a note which is worthy of extraction, and is as follows:—

"Out of 657,401 scholars who in 1863 left school in France, 395,293, or 60 per cent., could read, write, and account; but 263,008, *i.e.*, 40 per cent., had uselessly spent their time at school, or had carried away very insufficient knowledge, which many of them had forgotten."

Bearing in mind that this address is from one of the most enlightened manufacturers in France, I am desirous of recalling to your notice one of its sentences.

"Is it," says he, "in speaking of the difficulties attending the education of employés, and the languid feeling of the society, that we ourselves, absorbed by the sad state of affairs, have been less active at the very time when it was needful to redouble our efforts."

in order to contrast it with the action of so many of the manufacturers brought under the Factory Acts Extension Act, 1867, who, being also in the midst of a sad state of affairs, not only did not take advantage of such an opportunity to promote the education of the young in their respective neighbourhoods, but absolutely discharged them all, so that the education anticipated from it has been undoubtedly a present failure.

See what the master of a national school in the black country writes to me last spring:—

"I am a certificated Church of England schoolmaster, and have been in charge of the mixed school, my wife taking charge of the sewing, for more than two years, and have good reports from the Inspector of Schools, and am known to the vicar and many others of the resident gentry. I find myself in a population of 5,000 souls, the only one by whom anything like education is to be imparted to the crowds of children about me.

I have no salary but the school fees and capitation grant. Great distress prevails, and I see great need for free or very cheap schooling. We have six children, and the school fees amount to 15*s.* or 16*s.* a week, out of which has to be paid gas and many materials. If the half-timers from the nail and chain shops attended school under the Act, it might do very well, and supply all requirements. As it is, there exists a dogged indifference to education among all classes, and unless some action be initiated, I shall be obliged to seek another situation."

But thus it has ever been. The manufacturers know that educated workers are the most controllable, the most efficient, losing less time than the ignorant, and making infinitely better work; but they employ the children that ought to be at school; they abhor the trouble, as they say, of the school clauses of the Factory Act. The cry is one of "sauve qui peut." He that will teach, may teach; but not us! Let history again repeat itself. On the 12th of August 1834, when the Textile Factory Acts were being brought into operation, Mr. Inspector Rickards thus wrote:—

"The schooling clauses are so very objectionable to the mill occupiers generally that, to avoid what they deem an intolerable inconvenience and trouble of complying with them, they have discharged from their mills all children under 11 years of age. This has been carried on in these districts (Yorkshire and Lancashire) to a distressing extent; and the children so discharged, instead of receiving the proposed education, get none at all. They are turned out into the wide world, to seek other employment, or to wander about the streets of towns in idleness and vice."

There is one more point worthy of particular notice in M. Dollfus's address, and it is that, the nearer you are to the work of children the nearer you are to educational evidences. Thus, in the spinning department of their establishment, which is the process in which most children and young persons are employed, the illiterate are 46 per cent.; whilst in general labour this per-centage is as high as 57. The figures of the general educational condition of scholars in 1863 proves, I think also, one of my former corollaries that, a half-time child at school learns as much as a whole day child that never works: for whilst 54 per cent. of the spinners were not illiterate at all events, of the day scholars, 40 per cent. had spent their time at school uselessly. I hope there may be henceforward, more examples equal to these I have here shown, of this regard for the education of workpeople who are oftentimes brought to live under the necessity of being near their places of work, quite away from the ordinary means of education; and that, in future reports,

I may be able to state with more preciseness than now, what is being done in so important a matter.

On the 26th October 1868 Mr. Sub-Inspector Johnston writes from Birmingham :—

"I see more and more every day what necessity there is to enforce attendance at night schools of 'young persons.' There are numbers growing up without any education, and others, forgetting the little they learnt previously. In a few more years, say five or six, they will be men, and we should feel more immediately the effects of this education than that of 'children.' I could carry out a system of night schools very easily and without any opposition. The employers, many of them, do what they can to get the boys to go, but cannot do much."

I append also with considerable satisfaction the following notice distributed by Messrs. McIntyre, Hogg, and Co., of Dublin, showing their earnestness in the education and well-being of their workers.

"City Factory Evening School.

"The hours are so altered that every one attending this school may be at their homes before ten o'clock p.m.

"It is requested that all the parents and guardians of the young scholars in particular will see that none are ever later in being home than before ten o'clock strikes by the town clock.

"Parents and guardians are also earnestly requested to call at the City Factory during school hours, to see the attendance list, once a week, if possible. This duty will be neglected by none but those who are careless about the welfare of their children or those entrusted to them.

"Every person, old or young, employed in the City Factory, is expected either to be able to read, write, spell, and count well, or to be steadily learning to do so.

"Any scholars not attending regularly will be dismissed."

Here at least is an evidence of the desire of the firm to co-operate with parents, and an earnest call upon them to reciprocate it, in the education and moral government of their workers.

I have been also gratified to observe, in a little code of rules transmitted to me by the owner of the Glass House School, Pateley Bridge, (one of the schools in the Schedule,) an effort to carry out the principle of education continued after 13 years of age, and which, I think, somewhat meets the desire of those advocates of a further restriction of the age of scholars to 14 years. The rule is, "when a child has "attained 13 years of age, and is entitled to leave school "for full work, a form will be filled up to the parents "of the child, showing the time he or she has attended "school, and the progress made in the elements of general "knowledge. Where a manifest deficiency is discovered

" a further extension of half-time work to 14 years of age
" will be recommended, subject to the consent of the parents.
" Scholars not attending regularly will be dismissed."

(*See Table opposite.*)

I now, Sir, proceed to ask your attention to the following reports of my Sub-Inspectors on the working of both the Factories Act Extension Act, 1867, and the Workshops Act.

* Reports by the Sub-Inspectors on the operation of the Factory Acts Extension Act and the Hours of Labour Regulation Act, so far as they have been able to observe both, for the ten months ended the 31st of October 1868.

North Wales District.

Sir, Llangollen, 10th November 1868.

I herewith forward you my report of the working of the Factories Extension Act in my district. At the time of the introduction of the Act into this district the manufacturers were opposed to it, and regarded it as an Act that would prevent them employing young persons under 16 years of age, and threatened to discharge all hands under that age ; but, on becoming more acquainted with the provisions of the Act, they found they were able to employ young persons as hitherto. Many of the manufacturers are decidedly in favour of the Act. The greatest objection, I hear, is the number 50 being too high for constituting a factory. For instance, A. and B. are partners in a woollen mill working under the provisions of the Factory Act. A. employs 50 hands in separate premises at hand work, spinning wool, &c. B. has a similar establishment, and only employs 45 hands. These parties are joint occupiers and partners in the mill, but have separate establishments in the town, doing precisely the same kind of work ; one, A., under the Extension Act, B not ; B. doing equal if not more work than A. I think if the number 50 was reduced it would give satisfaction. The only parties who have resisted the operation of the Act are the proprietors of the slate quarries, who consider their works not to be under the Act. This question was brought before the bench at Carnarvon Petty Sessions lately, the magistrates deciding slate quarries were not liable to the provisions of the Act, in fact not factories, which decision appears to me to be contrary to the interpretation of section 3 and definition 7. The decision of the bench must be decided in a higher court, as it will involve the inspection or non-inspection of some thousands of workpeople.

I cannot learn the Workshop Act has been carried out in any part of my district, and never will be, unless the inspection of the

---

* I regret that on this occasion I have no report to offer from Mr. Assistant Inspector Ewings.

| 1. Place where the Works and Schools are established. | 2. Name of Proprietor. | 3. School Rooms, size of, in Feet. Boys. | Girls. | Infants. | Class-Rooms. | 4. Total Cost of Buildings, inclusive of Teachers' Residences. | 5. Amount contributed by Privy Council or any other Body. | 6. Average annual Cost of Schools to the Proprietor. | 7. Are the Parents at perfect Liberty to send their Children to School, or not? | 8. Has the Principle of a small Tax on Workmen's Wages for Educational Purposes been at any Time adopted? | 9. Is any Kind of Preference given to Children who have been educated in the School in supplying Vacancies in the Works, or after they have obtained Employment? | 10. How long have the Schools been opened? | 11. Are the Rules of the Schools with respect to Regularity of Attendance, personal Cleanliness, and the strict Payment of the weekly or other Fees for Instruction, rigidly enforced? | 12. Do the Parents of the Children purchase Books, Slates, and other School Requisites, or are they provided by the School? | 13. How many Children attend whose Fathers earn less than 1*l.* per week? | 14. Are any Scholars free? How many, and under what Circumstances? | 1. Teacher's Grade of Certificate. Boys. | Girls. | Infants. | Evening. | 2. Fees paid by Children of Workpeople. Boys. | Girls. | Infants. | Evening. | 3. Fees paid by Children of other People. Boys. | Girls. | Infants. | Evening. | 4. Number of Children belonging to Workpeople in each School. Boys. | Girls. | Infants. | Evening. | 5. Number of Children belonging to other People in each School. Boys. | Girls. | Infants. | Evening. | 6. Average Age of all the Children in the various Classes. Boys. 1 | 2 | 3 | 4 | 5 | 6 | Girls. 1 | 2 | 3 | 4 | 5 | 6 | Infants. 1 | 2 | 3 | 4 | Evening. 1 | 2 | 3 | 4 | 7. Are there any printed Rules or any Forms in use? |
|---|---|---

workshops is placed in the hands of duly appointed inspectors. The local board will never fairly carry out the Act; many of the board, having workshops, will not take proceedings against any member of the board or neighbour, occupier of a workshop. By reducing the number of 50 to 20 or so, I think it will give satisfaction to parties now under the provisions of the Extension Act, and bring many who ought to be under the Act.

I am, &c.,

Robert Baker, Esq. S. S. Kent.

Bolton District.

Sir, Bolton, 30th October 1868.

In replying to your letter calling upon me to give you the result of my experience of the working of the Factory Acts Extension Act, 1867, I must briefly report that it has been more favourably received in my district than I had anticipated, the law being in almost all cases cheerfully complied with.

I have, by dint of suasion rather than force, induced the employers generally to work the regular factory hours, and to avail themselves as little as possible of the various modifications; but this, in glass and paper works, is impracticable.

It is much to be regretted that the legislature did not extend the scale to a lower number than 50 persons employed, the consequence now being that the occupiers of workshops enjoy great advantages over those that are under the Factory Act.

There is a great outcry against that Act; indeed I have had much indignation expressed against its existence; but in no place did I find that feeling more strongly manifested than in the "black country," and particularly in Wolverhampton, while I was temporarily engaged in that district.

My attention was directed last week to a "workshop" establishment at Leigh, in which 37 little girls, from 8 to 10 years of age, were employed long hours, and without any schooling, in the "throwing" of silk, the frames being turned by manual power only.

I trust that this imperfect little sketch will convey to you some idea of the operation of the respective Acts in my division, and hope that, at no distant period, some extensive amendments will be made in both of these statutes.

I am, &c.,

D. Jones,

Robert Baker, Esq. Sub-Inspector.

Stockport District.

Sir, Stockport, 14 November 1868.

The Workshop Act has only been put into operation in my district at Lymm and Denton.

In Lymm, at the instance of the master fustian cutters, now under the Factories Acts, to regulate what is known as domestic fustian cutting, *i.e.*, persons having frames in their own houses, worked at by their own families. The effect of its operation in

Lymm has been to drive many of these cutters into the larger works, in consequence of the restriction to their hours of labour thus effected, and in many cases of the unfitness of the rooms for work at all.

At Denton the Act has been put into operation at the instance, principally, of the master hatters who employ over 50 hands, and are in consequence under the Factories Acts, to regulate those employers in the same trade who employ a less number of hands. These latter number about 30, and there are about 20 who employ over 50 hands.

The local board has issued an abstract to the above 30 lesser works, but as yet have not appointed an inspector. In consequence, however, of their action, there is amongst them a general compliance with the provisions of the Workshop Act.

There is, however, a practice pervades Denton which makes a large number of houses workshops. I mean, the practice of domestic or out-of-door hat trimming. The hat manufacture is the staple trade of Denton, and a great number of girls earn a livelihood at hat trimming, which is extensively done at the works. But as these trimmers get married they continue their work as out-of-door or domestic trimmers at their own houses and have hitherto been in respect of this work entirely without regulation. These out-of-door trimmers are generally assisted by the younger members of the family, or by a young girl taken as a servant, and with a view to learn the trade. When they are old enough or experienced enough they are employed at the works, until, in their turn, they, again, become householders, and out-of-door trimmers.

At present, trade being slack, I have not found any evidence of much overwork in this out-of-door duty. I do not hear of work exceeding eight hours per day; but I am informed that when the trade is busy there is a good deal of overwork.

In Cheshire generally there are not any steps taken to enforce the Workshop Act, which is much required in the important districts of Stockport, Hyde, Chester City, Birkenhead, Macclesfield, and Congleton.

I am, &c.,

Robert Baker, Esq., THOMAS STEEN.

DEVON DISTRICT.

SIR, Frome, Somerset, November 18, 1868.

THE Factory Acts Extension Act has in my district been on the whole well received, though the experience of its working is limited, the great majority of the works having been only recently discovered for the first time, and since supplied with abstracts, &c., without the necessary explanation having yet been given them for working the Act.

By far the most numerous class of works which comes under the Factory Acts Extension Act is that of—

Printers and Bookbinders.—These people are accustomed almost universally, to work from 7 or 8 a.m. till 7 or 8 p.m., and, being in the great majority of instances owners of shops, which

they must keep open till late at night, and which it is utterly useless for them to open early in the morning, they say that it is impossible for them to keep the ordinary limit of six to six. Accordingly they are applying almost universally for the requisite seven to seven or eight to eight notices. In country newspaper offices, where the publishing night comes once a week, they have great difficulty in complying with the provisions respecting the employment of boys at night. One of those provisions is that the boys should have a holiday on the preceding and succeeding day. The succeeding day they can manage well enough, but the preceding day they cannot, that being the busiest day of all the week. Then, again, they complain that no provision is made for working partially into the night. On publishing night, say once a week, they would gladly keep their boys two or three hours overtime, but if the boys have been employed, as they generally are, from 8 a.m. to 7 p.m., (i.e. during the preceding day,) they cannot legally employ them in the night, even if it is only for two or three hours. They would consider it a boon if the provisions for employing young persons, &c. for 14 hours in bookbinding were extended to printing, or else that on publishing nights they should be allowed to employ boys partially into the night, without the stringent provisions which were intended to apply to working during the whole night. As to Saturdays, they have been accustomed hitherto generally to keep on their boys until 5 or 6 p.m., and the half-past four limit (the limit for this year) seems unpalatable to them. Half-timers are scarcely ever employed in printing offices; in fact the boys who are employed in them are required to have some decent sort of education before coming, and are scarcely ever bound until they are 14. In bookbinding, children quite young used to be employed, but if under school age they have generally been discharged; in fact the antipathy to employing school hands, where it can be avoided, seems to be universal. This antipathy, I believe, is founded mainly on the trouble caused to the factory occupiers in enforcing the attendance of the children at school, and the fear lest any irregularity in the attendance should entail liability on themselves. In some places, further up the country, I am told that printers have discharged, not only their half-timers, but their young persons also, and this it is expected may lead to men being more generally employed, and a higher rate of wages being established in the trade.

As regards certificates, the boys being almost invariably bound as apprentices, and very seldom changing, there will not be much to be done or much to be looked after in this respect, after the boys have been once certified; but several complaints are now made that the expense of certificates should fall on the employers, many of whom are very poor. After Christmas, when the surgeons shall have sent in their bills, I have no doubt that these complaints will become much more numerous, but at present most of the employers are in happy ignorance that the expense devolves on them. They think that because Government requires them to

get certificates, and appoints the certificating surgeon, Government will also pay for the certificates ; and would there be any harm in its doing so in the same way that it already pays for accident investigations ? The expense would not probably be anything very great, and the obtaining the certificates within the proper time might then without scruple be most rigorously enforced.

As regards foundries, and all large engineering establishments, I find that, with the exception of one or two foundries in the south of Devon, (where they have hitherto been accustomed to work from 6 a.m. to 7 p.m.,) the ordinary factory hours are almost universally observed, *i.e.*, from six to six, (with 1½ hours for meals,) and one or two on Saturdays, and this Act will make scarcely any change in the usual hours of work. The extra half hour which in foundries is allowed when the process is in an incomplete state is much prized.

Half-timers are scarcely ever employed in the foundries in my district.

As regards paper mills, male young persons still continue in many cases to work "according to the accustomed hours of the trade," and the Act does not seem to have made much change in their employment. The only inconvenience that I hear of is as regards Saturdays. Hitherto the boys have been accustomed to work night work and day work alternate weeks. In one case they do not work at all on Saturdays, and only 55 hours per week; in the other case they work 15 or 16 hours on Saturdays, and 66 hours per week. In both respects the employment in this latter case is illegal, the Act saying that the hours of attendance shall not in any period of 24 hours exceed 14 hours, and also that the hours per week shall not exceed 60. In one or two instances the mill owners have met this difficulty by getting in a fresh set of boys on Saturday evening, but they say that the boys do not care to be brought in like this for an hour or two, and both sets of boys are much better pleased with the usual arrangement, which gives them one Saturday entirely free. Women are now never employed at night.

Half-timers are scarcely ever employed in the paper mills in my district. (Paper mills are placed in one respect at a great disadvantage as regards cotton and other mills, for they cannot, as these latter mills can, stop and start their machinery again without considerable loss. There is always a lot of paper which has to be sacrificed at the first starting of the machines.)

As to glass factories.—There is only one in my district, but that seems to experience no difficulty whatever in complying with the factory hours. In fact their hours of labour are less than those allowed by the Act.

As regards blast furnaces, &c., the hours of work are almost always below the factory limit. But there is hardly a young person employed in them, at least in those in my district.

As to the 50-hands clause, there is a great deal of uncertainty about working it. It may be all very well where an establishment employs 200 or 300 hands, and no doubt can be entertained as to

it being under the 50-hands clause, but where an establishment employs somewhere about 50 hands, it is very difficult to decide whether it is under the 50-clause or not.

In fact unless the mill owners gave you every help (which they certainly have done) it would be impossible to work it. In one case, Parsons and Co., brush manufacturers, Wells, who, on my first visiting them calculated their hands to be two or three under 50, subsequently wrote to me, and informed me that they employed 51. They might, if they had wished, have discharged one or two hands, and so evaded the 50-clause ; but they said that they preferred coming under the Factory Acts Extension Act to coming under the Workshop Act.

Brickfields are very difficult to deal with under this clause, not only from the numbers incessantly varying, but from the occupation being in itself so inconstant, being suspended on wet days and in frost, and the brickfields being in fact shut up entirely for at least six months of the year. During summer the men wish to make the most of their time on those days that they can work, and think it a great hardship to be obliged to discharge the boys (whom they themselves employ) at six o'clock in the evening.

As regards the Workshop Act. In no part of my district can I hear of any attempt being made to enforce it, except at Torrington ; and as to its operation there I have no information. Here (at Frome) I have hsd some little communication about it with the clerk of the guardians, and have given him an abstract of the Workshop Act ; moreover, I have been applied to by a milliner here to know if I should prosecute her in case she worked her girls after half past four on Saturdays ; but nothing seems to be done about putting the Act into force (except, as I said before, at Torrington), and the non-enforcement of the Act is a great hardship on "factory" occupiers.

Summary.

As a general rule, the hours of work in "factories" in the west of England are less than those allowed by the Factory Acts Extension Act (though in many cases the limit is not the ordinary one of from six to six), and the hours of meals are not unusually more, viz., two hours instead of one and a half.

As regards printers, they work almost universally from seven to seven or eight to eight, and complain that no provision is made for working partially into the night ; at least one night in the week.

As regards certificates, the small mill owners (of whom there are now large numbers) complain greatly of the expense devolving on them (and would there be any great objection to Government paying for certificates in the same way that they do for accident investigations ?)

As regards half-timers, there is an universal antipathy to employing them, founded, I believe, mainly on the trouble of enforcing their attendance at school, and the fear lest any irregularity on the part of the children should entail liability on the mill owners.

As regards paper mills, the Act has produced no inconvenience, except as regards Saturdays.

As regards foundries, &c., the Act has produced no inconvenience, the hours and meal times being almost universally thosse allowed by the Factory Acts Extension Act.

As regards blast furnaces, &c., scarcely any young persons or women are employed in them, and the hours of work are almost always below the factory limit.

As regards the 50-clause, it is difficult to work where the number employed is anywhere near 50 (especially in the case of brickfields).

As regards the Workshop Act, it is enforced, as far as I can learn, nowhere, except at Torrington, and its non-enforcement is a hardship on "factory" occupiers.

On the whole the Act has certainly been well received, though the experience of its working is limited, the works in the great majority of cases having only been discovered for the first time, and since supplied with the abstracts, &c., without the necessary explanations having yet been given them for carrying out the Act.

I am, &c.
GEORGE F. BULLER.

WORCESTER DISTRICT.

SIR, Worcester, 10th November 1868.

YOU will probably receive from each subdivision a reply to your letter of inquiry, and I therefore will endeavour to make my observations as short as possible.

No attempt, as far as I can learn, has been made, in any part of Shropshire, Hereford, Monmouth, or Worcester, by the local authorities, to carry out the Workshops Regulation Act, but in December 1867 a broadsheet was printed and circulated among certain iron shops, &c. in the city of Worcester, "published by "the local authority of the city of Worcester, December 1867," professing to embody the provisions of the Act, and specially addressed to parents and guardians of children. I obtained a single copy of this broadsheet, after inquiry at five localities yesterday, but cannot learn that any attempt has been made to put the Act in force.

I was once asked to put the Act in force at Stourbridge, by a man who said his child was kept at work very late at night in a nail shop. And at Redditch, in the needle factories, there is great complaint that the "pointing shops" work late at night, while the large factories, in which the same work is carried on, have to close at factory hours. This is found to be so greatly to the disadvantage of the factories that in many instances the pointing and polishing portions of the needle manufacture are "put out" to be done in the workshops, which are practically, owing to the inaction of the local board, &c, entirely without restriction in the age of the workers or hours of employment.

In the large iron works, such as Blaenavon, which have three or more resident field surgeons, the necessity of sending five miles or upwards for the certifying surgeon has been complained of as a great hardship, and in the large works, of which these may be taken as a type, the general feeling appears to be that a very large part of the children of the iron working population will be unemployed altogether until past the age of 13, or until allowed to work night turns.

It is said to be almost impossible to find work for women or children during the daytime alone in works that are continuously going on day and night, and in consequence of this a great number of women and children have been discharged altogether from iron mills and similar works. I do not know any case in which a child is now at work "short time" and going to school in any large iron mill in my district.

In the nut and bolt works at Cwmbran, Mr. Raffery, the manager, told me that the company were in June and July last losing as much as 50*l.* a week in the screw department, the machinery of which is worked by the same power as the Siemens steel furnaces, men being employed in the furnaces, and women alone, who are now prohibited from night work, in the screw polishing department.

Among the printers there is generally a desire to select the hours of work, *i.e.*, to work at any hours during the 24, providing always that the amount of $10\frac{1}{2}$ hours be not exceeded. Many small local newspaper proprietors, &c. have told me that the power to work from 11 a.m. to 10 p.m. on one or two days a week, *i.e.*, on publishing nights, would be a great boon to them, but, so far as I know, very few applications have been made to the Home Secretary for special permission under Clause 12. Per. Mod. Sch. Factory Acts Extension Act.

In tin-plate works, also, where the bran-dippers, or women who dry and polish the tin plates, "follow on" after the plate makers and tinners have prepared the plates, several complaints have been made, that as the girls cannot begin to work till two hours after the factory is opened in the morning a clear loss of two hours' labour is incurred if all women have to quit the works at 6 p.m., as the men who are preparing the plates cannot get ready a larger amount than can be completed by the evening.

I have mentioned the principal objections that have been stated as to the working of the Act. In all large works, except works such as the day nail works, who have been able to expend large capital in machinery so as to do in the daytime alone work hitherto carried on by relays of children working day and night turns, the endeavour has been, rather to avoid the Act altogether by discharging young persons and children, than to attempt to carry out the short time and school regulations.

I may add, that very extensive schools, at which the charge is almost nominal, are attached to and solely supported by the Blaenavon works, and also the various branches of the Ebbw Vale Company at Abersychan, Ebbw, &c., and the day nail works school, at which there is a night attendance averaging

nearly 200, is probably of its kind as perfect as any in the kingdom.

E. B. Fitton,
Sub-Inspector.

R. Baker, Esq.

North Stafford District.

Sir, Stoke-on-Trent, 10th November 1868.

In compliance with the request contained in your letter of the 26th of October, I beg to submit to you the following report on the working of the Factory Acts Extension Act, 1867, and the Workshops Regulation Act, in my district.

There are 183 establishments in North Staffordshire, which are factories within the meaning of the Factory Acts Extension Act, 1867. The nature of these works is shown in the following table:—

Blast furnaces		13
Copper mill		1
Iron mills		16
Foundries		27
Manufactories of machinery		21
Miscellaneous metal works		12
Manufactories of gutta-percha, &c.		0
Paper mills		5
Glass factories		5
Tobacco factories		3
Printing shops		52
Bookbinding shops		3
Other factories employing 50 hands:—		
Shoe factories	16	
Breweries	7	
Silk factory	1	
Cooperage	1	
		25
Total		183

It will, I think, be convenient to classify my remarks under the above heads.

Blast Furnaces.

The age for unrestricted employment having been temporarily lowered to 16 years, there are very few persons at present employed in blast furnaces whose hours of work are regulated by law. A considerable number under this age have been discharged. Females have never, to my knowledge, been employed in such works in North Staffordshire.

I have found machinery well fenced, and the few accidents that have occurred could not have been prevented by fencing.

Copper Mills.

There is one copper mill in my district, employing, when last visited, only two or three lads from 14 to 16 years of age. The hours of work had been previously regular and within the legal

limits ; and I am not aware of any change having been effected by the law.

Iron Mills.

The development of the North Staffordshire iron field has doubtless been checked by the state of trade for some years past, and there are at present only six firms in the division engaged in the manufacture of iron, exclusive of five who occupy scrap mills in the outlying parts of the county. Some of these six firms, however, manufacture on a very large scale; and I regret to state that the operation of the Act has not been such as to reconcile them to legislative interference, nor, I fear, to satisfy those who have been most active in its promotion and most sanguine as to its results.

The provisions of the Factory Acts may, I suppose, be roughly classed under two heads; the sanitary and the educational. I have had the satisfaction of witnessing the successful operation of the latter in the potteries of this district; an operation so successful that it has gone far towards reconciling many with other portions of the law to which they have taken exception ; but a law virtually the same has been hitherto, and will, I fear, continue barren of educational result among our iron workers. I am not aware of a single child having been sent to school from the iron mills in my district ; and from answers to numerous inquiries, I conclude that very few, if any, of those boys who have been discharged as under 13 years of age, have been subsequently sent to school by their parents.

This educational failure, so much to be regretted, results naturally from the character of the work in iron mills, which necessitates employment at night. No boy can be employed in an iron mill, except on a few special jobs, unless he can take his turn at night work ; and the law forbids night work for all under 13 years of age. The consequence is that no boys under 13 years can be employed ; and as no educational test is applied before employment, and the parents are frequently too careless, too poor, or too grasping to educate their children without compulsion, their education is in nowise promoted by the restriction.

A large number of boys between 12 and 13 have been necessarily discharged from the iron mills, and considerable delay and loss have been caused by the difficulty of filling their places ; while complaint is made that these evils are endured without any educational compensation, and that, being debarred so long from employment in the iron trade, many of those who might be expected to enter it will find earlier occupation elsewhere, and will be lost to it altogether.

I am of course aware that the night employment of boys under 13 has been condemned on sanitary grouuds, nor would I propose its unconditional permission in iron mills, though I do not consider it so injurious as day work in some other trades. I am aware also that uniformity is desirable in our factory laws. The consolidation of many of the statutes now in force would be most

beneficial. But uniformity of result is even more important than uniformity of enactment; and I would respectfully suggest a doubt whether in this instance sufficient allowance has been made for the peculiarities inseparable from the iron manufacture, which render the half-time system altogether unsuitable to its wants, and, under the present law, produce a virtual restriction of its labour market far more severe than is felt in any other trade.

The educational results of the Act of 1864 have become gradually more apparent and satisfactory; but, while the nature and conditions of employment in iron works remain unaltered, I cannot anticipate any such progressive improvement in the operation of the law in this respect, as applied to them. The number of works, however, in this division, is certainly small. Your experience elsewhere may possibly be different; and I shall await with great interest the publication of your report with respect to other districts.

Foundries and Manufactories of Machinery.

The foundries in my district are for the most part small; and though there are several large machinists in this neighbourhood, they employ very few boys, except apprentices 14 years old and upwards. A few half-timers are, however, going to school from a small foundry near Tamworth.

The hours of work have not been materially modified by the Act, except as regards occasional overtime, the interdiction of which to boys under 16 has not caused any serious inconvenience that I am aware of.

Miscellaneous Metal Works. Paper Mills. Glass Factories. Tobacco Factories.

On the operation of the law in these classes of factories I have but few special remarks to make. Its results are generally acknowledged to be beneficial both by masters and workmen. Most of the inconveniences anticipated are now seen to have been imaginary, and the increased regularity of work is recognised as a benefit and in many cases highly valued. The number of young persons employed being small, no considerable inconvenience has been experienced for want of hands, and half-timers are almost unknown.

Printers and Bookbinders.

All the printers in my district are booksellers and stationers in the various towns, and most of their offices would be more suitably included under the Workshops Regulation Act, if it were efficiently enforced. The legal hours of work were adopted some years ago in the largest printing office that I visit, and have been found to answer very well. The boys of course worked occasional overtime before it was forbidden by law, but no inconvenience appears to have arisen from the restriction that can be balanced against the protection afforded to the boys. Some of the other printers applied early in the year to work between 8 a.m. and 8 p.m., but the application was opposed by a

majority of the workmen, and they are now working the regular hours without any serious inconvenience. The number of young persons employed in printing offices is very small, and there are no half-timers.

Other Factories employing 50 hands and upwards.

Shoe Factories.

There are eleven of these factories at Stafford, and five at Stone, some of them manufacturing on a large scale. The law has been introduced in all of them without difficulty, and the principal complaint preferred against it refers to the limitation of work between 6 a.m. and 6 p.m. The ordinary hours of work before the Act was passed did not exceed 58 hours per week, but they were taken in many cases up to 8 o'clock at night, and the female workers are not generally inclined to commence early in the morning, though compelled to leave early at night. Many firms are now making only from 56 to 58 hours per week, but several of them have told me that they get as much work done as before. The compressibility of work, especially female work, is certainly surprising. Perhaps remedial measures were not so much required in these works as in many others; but there is no doubt that the general effect of the law is salutary here as elsewhere, where exceptional circumstances do not interfere with its operation.

A few of the shoe factories are employing half-timers.

Breweries.

The question raised concerning the application of the law to breweries has been so recently settled that I have had no opportunity for forming an opinion as to its operation.

I would add, before closing, a few general remarks.

The observance of the law in my district has been in most cases satisfactory, and among employers generally I have met with an evident desire both to obey its provisions and to assist myself. No cases have arisen, till recently, that have called for its legal enforcement; but I have been compelled within the last week to commence proceedings against a firm in the iron trade for neglect of registration, and the employment of boys under 13 years old at night. The special rules authorized by section 15 have not been adopted in North Staffordshire.

We should, I think, have power to require and enforce limewashing where necessary, subject to the decision of a magistrate.

The definitions of a factory, and the dividing line between factories and workshops, are far from satisfactory. Many small shops now visited by us as factories [I have already alluded to small printing shops] would be more properly treated as workshops, while many large establishments employing nearly fifty hands should certainly come within our inspection.

The direct educational effect of the law has been very small

throughout my district. There are certainly not more than 25 children attending school under its provisions in North Staffordshire.

I regret that a pressure of other work during the last fortnight, since the receipt of your letter, should have prevented my paying special visits to a larger number of the factories referred to in this report, which I am thus obliged to leave very incomplete.

The Workshops Regulation Act.

This Act has been nowhere enforced in my district, except in Leek ; but it has there been carried out with a vigour and success which are highly creditable both to the commissioners and the inspector whom they have appointed ; and the result sufficiently indicates the immense benefit that would have been derived from its general enforcement, while pointing out several particulars in which modifications are required. Mr. Farrow, the inspector, informs me that he has furnished you with a detailed report on the operation of the law in his district, and I need add very little to such a report from him.

The Workshops Act has produced, however, one effect, to which I must allude ; the effect, namely, of stimulating the employment of half-time children in factories. The decision obtained last year, by which silk-twisters helpers are forbidden to work full time under 13 years of age, led to the first introduction of the half-time system in the twisting sheds, but the number was very small, and the prejudice against them very strong. Since the enforcement of the Workshops Act, under which nearly 200 children have been sent to school, many of them from the smaller silk workshops in the town, this prejudice has very much abated, and there are at present nearly 80 half-time children attending school from the silk factories, making a total of nearly 300 children receiving compulsory education in a population of about 10,500.

The immediate and abundant supply of additional school accommodation for this number is one of the most pleasing features of the case, and may serve as an incentive and encouragement in other places.

The Factory Acts permit the employment of children as young persons, at 11 years of age, in the winding and throwing of raw silk. The result of this permission in Leek has been most disastrous to the cause of education. The half-time system has been till lately nearly banished by it from the town, and nearly all the children have commenced work at 11 years old, when they have been either quite uneducated, or so nearly so that without a Sunday school they would soon have lost all they had previously learned. The Workshops Act contains no such provision. It seems to be imperative that the two laws should be made to correspond ; and the question arises, whether the age should be raised in the one or lowered in the other. Physically, indeed, a child may be fit for full work in a silk mill at 11 years of age ; but the educational effect of such early employment, without previous compulsory education, or an educational test, is no less

lamentable in a silk mill than it would be in a cotton mill or a pottery.

The Workshops Act has proved of considerable assistance to me in enforcing the Factory Acts themselves, by taking, as it were, in flank and rear, many of those abuses and evasions which a factory inspector can only attack in front.

I have already alluded to the change which I consider necessary in the distinctions between workshops and factories; and the workshops of Leek afford abundant illustrations of my meaning. Large silk manufactories are at present workshops, while foundries and printing offices, employing one lad over sixteen years of age, are factories.

The conclusions to which I have been led by the eminent success of the Act in Leek, and its total neglect elsewhere, are these:

1st. That local authorities are fully competent, through the medium of proper officers, to deal with such an enactment; and

2nd. That they should be legally compellable to appoint such officers and to enforce the law.

I have, &c.

Robert Baker, Esq. SAM. W. MAY.

OXFORD DISTRICT.

SIR, 17th September, 1868.

IN compliance with your request, to send you some report on the working and progress of the Factory Acts Extension Act, 1867, in the district which I have recently vacated (Oxford), I beg to hand you the following. In so doing I would remark, that seeing the Act had been in force seven or eight months only when I vacated, the object and result of any report I can render will probably be not so much to show the "working" of the new Act, as the manner in which it has been received, the efforts which have been made to adapt existing arrangements to the law, and the probable effects and prospects for its working when it can be said to be fairly introduced and set going.

In a wide travelling district there has been little more than time to make a first round, and I need hardly say that a vast deal of time has been occupied in meeting objections, pacifying fears, and combating prejudices, and endeavouring to set the new law at work with a totally new, and in many cases hostile, class of employers and workers, in such a manner as to render it as little irksome as possible, and eventually to show its advantages. The greatest difficulty has generally been with the very smallest establishments, they being somewhat obstinate, and slow in realising that the law forbids their working protected hands at any hours they please, simply because they happen to employ only two or three instead of 500.

This only tallies with the experience of all in the factory department, that whether under the old or new Acts it is the smallest employers who occupy the most of one's time and give the most trouble.

In large establishments, as a rule, everything is conducted on a system, and the hours are usually moderate, while in small ones it is in the majority of cases exactly the reverse.

I am glad to be able to report to you that the new law has been received, as a rule, with that courtesy and respect due to a solemn and deliberate Act of the legislature, also that I, as its local representative, have been received in a similar manner, the exceptions to this being so few and unimportant as to be unworthy of notice.

Respectfully, however, as the the law and myself have been received, the employers have not hesitated to express their disapproval of any such provisions as seemed to them unnecessary or unsuited to their particular trades, in some instences advancing objections of a totally frivolous nature, which it only requires time and a little experience of the working of the law to efface, and which, like all my colleagues, I have taken pains to soften and correct to the best of my ability.

In other cases I must frankly confess that objections have been raised, and rough corners and inequalities pointed out, which are, to say the least, worthy of serious attention. Such are, however, not numerous, nor by any means difficult of adjustment.

It is not to be wondered at that in passing so comprehensive a measure, the legislature should find a few instances in which the incident of its provisions, when practically in operation, cause hardship, inconvenience, and loss, without producing compensating benefits to the employed. The result of what I have hitherto seen induces me, however, to incline to the opinion, that such cases are not so numerous nor difficult but that a careful investigation of them would lead to their speedy adjustment by slight modifications where necessary, to the satisfaction of all concerned.

The experience of those belonging to this department enables them promptly to detect what are frivolous and what are real complaints of this nature ; and by taking their opinion, in conjunction with the opinions of the objectors, a satisfactory decision, in each case, could, I think, be very speedily arrived at.

This done, I consider the prospects of the ultimate working of the new law, would be excellent ; and it would then become popular where it is now the reverse.

One of the chief difficulties in introducing the law is that in some cases both the employers and employed are hostile to it, and these are generally the cases where a modification would seem to me to be at least worth considering.

I will name a few of the instances which I can call to mind of trades appearing to call for such consideration.

1. Country job printers.

2. Straw hat and bonnet makers (comparatively idle half the year).

3. Bricks (ditto ditto), where not dried by artificial heat, and a few other instances which come to light now and then, chiefly among the "miscellaneous, or, 50 hands" people.

The allusion to this last class of works reminds me to express my opinion that the limit of 50 hands (which was perhaps a wise

one, in an experimental measure to begin with,) will have to be reduced; that it operates very unequally and unfairly, as the slightest inquiry will show that the protection of the "Factory Act" is far more called for in miscellaneous trades, employing from 10 to 50 hands; and finally that the "Workshops Act," which was intended to meet these cases, has been, as far as my experience goes, a total failure, and is, I fear, likely so to be.

Indeed were it even put into full operation, the injustice and absurdity of placing one employer who happens to employ 50 under the stringent provisions of the Factory Acts, while another, who happens to employ only 49 hands, is subject only to the lax and easily evadable provisions of the Workshop Act, are too glaring to be allowed to exist long.

Of my new district, I have not yet sufficient knowledge to say much, but I shall endeavour to have everything in good order as soon as possible.

I have, &c.
W. H. Beadon.

P.S.—I venture to express a most sincere hope that the seven to seven and eight to eight privilege will be freely extended to various trades after 31st March next:—to printers, to brick makers, and some others.

R. Baker, Esq. W. H. B.

Leicester District.

Sir, Leicester, 12th November 1868.

The Factory Acts Extension Act has on the whole worked smoothly in my division; the chief objections made to it have been to the rigid hours laid down, which have caused considerable difficulties, amongst printers more especially.

This, and the necessity for surgical certificates for those under 16 years of age, have caused the dismissal of many under that age. Another cause of complaint is the unequal operation of the Act in miscellaneous trades, extending, as it does, only to works where 50 persons are employed.

This is supplemented to some extent by the Workshop Regulation Act, it is true; but as much greater latitude in the choice of the 12 hours of labour is permitted by the latter, and no surgical certificate required, there is still great inequality.

This has been felt more perhaps amongst the straw hat trade in Bedfordshire than anywhere. While the larger and more respectable establishments are restricted to the early hours of 6 a.m. to 6 p.m., the smaller ones under the Workshop Act can work as late as 9 p.m.

The class of operatives in these larger establishments being somewhat superior to most trades, I have always wished they should be allowed to work from 8 a.m. to 8 p.m.

I have a very good account to give of the working of the Workshop Act in this town; it has been put on a thorough system, and the sergeant of police, appointed to visit, reports to me that he has about 550 places under inspection, and 700 children under 12 attending school.

Still the responsibility as to schooling has caused the dismissal of a great many children, and as they seldom attend school if not employed it is not an unmixed benefit. I have been much surprised to find that many of the schools will not receive "half-time" children. The reason is that the Government grant being now dependent on the examinations, the half-timers do not succeed so well.

The chief points requiring amendment in this Act are, I think, (1) to make it compulsory on all local boards, vestries, &c., or put it in the hands of the police, as in most places it is entirely neglected at present, especially in large manufacturing villages where there is no board of health; (2) to assimilate the hours of labour to the Factory Act, viz., that they should be taken between 6 a.m. and 6 p.m., and those to be put on a notice fixed up in the workshop. There would then only remain the surgical certificate as a material difference; and this, I venture to think, would be advantageously replaced by a certificate of real age from the registry, obtainable for 1*s.*, and which the child could take from place to place.

The expense of these surgical certificates has always been a source of complaint and a constant cause of prosecutions.

The Workshop Regulation Act should be made compulsory on all localities. It is now utterly disregarded in many towns and manufacturing villages: Luton, Dunstable, Wellingborough, Kettering, and many more. Until this is done the operation of the recent Acts will be very unequal and the cause of much complaint, but I am convinced the inspection of small works can never be done efficiently except by the local authorities; no stranger could find the greater part of them; and the staff of inspectors required for such an undertaking by the factory department would be ten times what it is now.

I am, &c.

Robert Baker, Esq. CHARLES N. GIRARDOT.

LIVERPOOL DISTRICT.

Victoria Villa, Huyton, Liverpool,

SIR, September 1868.

IN accordance with instructions received from you, I beg leave to hand you the following report relative to the operation of the Factory and Workshop Acts in this district.

The particulars which I am able to give you, and the deductions I have drawn therefrom, are the result of personal inspection and inquiry.

To make my report as clear as possible, I purpose treating of each place of importance coming under my supervision separately, and will commence with

Liverpool.

In this town and its suburbs there are 260 factories coming under the regulations of the different Factory Acts which have been passed since 1833. By the 3rd and 4th Will. IV. the rope walks in Liverpool were brought under the regulation of the Factory Act, and remained so until they were exempted by a

special Act passed in 1846. The larger roperies, where 50 or more hands are employed, have been recently again brought under by the Factory Acts Extension Act, 1867, and I find the proprietors of these walks generally well affected towards the Act, though in some cases questioning whether they can be lawfully compelled to conform to its requirements until the special exemption referred to above has been repealed. In one or two instances they have spoken highly of the good likely to be effected by a supervision of the youthful labour employed in roperies, and have expressed an opinion that the Act should be extended to all premises where the process of ropemaking is carried on. The extent to which women and young persons are employed in this work may be gathered from the fact that in five of the principal roperies in Liverpool the aggregate number of women and young persons employed amounts to 810.

Under the provisions of the 27th and 28th Vict., 1864, there are in Liverpool—

3 tobacco-pipe factories.
1 lucifer-match factory.
1 paper-staining factory.

In the two former classes of factories it was customary previous to the passing of the above Act to employ young children, which, especially in the lucifer-match making, was attended with injurious effects to the health of the children. Young persons are now employed in their stead; and as their hours of labour are restricted, and they are physically better able to undertake the work, as well also as that ventilation and proper sanitary measures are insisted on, they do not appear to suffer in health as heretofore.

I found one case in which children were being employed in a tobacco-pipe factory full time and without schooling. I took proceedings against the proprietors, and obtained a conviction, and I have now every reason to believe that the Factory Acts are strictly complied with in the factories brought under in 1864.

The Factory Acts Extension Act, 1867, has brought a large number of works under supervision.

The following list will show their number, and the nature of the work carried on:—

113 where metals are dealt with in various processes.
62 letter-press printers and bookbinders.
14 tobacco manufactories.
9 sugar refiners (more than 50 employed).
3 glass works.
2 rice and flour mills (more than 50 employed).
1 india-rubber factory.
1 oil mill
1 distillery
1 tanning establishment
2 chemical works
4 millinery and dressmaking establishments
2 cabinet makers
} more than 50 employed.

I am happy to be able to report that I have found generally, throughout all branches of the metal manufacture, a ready compliance with the regulations of the Act; and upon only one point have I received any complaint either from employers or employed, and that is with regard to restrictions placed upon the employment of young persons in cases where repairs have to be done to ships lying in the public graving docks.

The case stands thus: A ship in want of repairs is taken into the graving docks, and the repairs intrusted to one of the Liverpool shipsmiths, to be completed in a certain time or in so many tides. It is of course often necessary to work at night, and the nature of the work is such that lads are required to assist the men. According to the Act, however, the shipsmith cannot send his young persons into the docks to work at night; he is compelled therefore to send down to the dock-heads and hire any lads that are loitering about, and set them to the work. By this means a vagabond sort of life is encouraged among the lads themselves, many of whom prefer waiting about the docks, and picking up these jobs, for which they get well paid, to being constantly employed and looked after within the factories.

I have been assured by some of the gentlemen connected with the ship-building and ship-repairing business, that so much is this the case that it is with difficulty they can get lads to remain with them in their factories.

As I am aware that you have personally taken up this matter, I will go no further into it at present.

Among the printers there have been many complaints* and considerable hostility manifested towards the Act. I am inclined to think, however, that it is gradually dying out, chiefly in consequence of permission having been in many cases granted to them to work from eight to eight, and to give the required holidays to a few of their women and young persons at a time, and not to be compelled to send all away together.

In many cases they complain that their work is of so intermittent a character that they ought not to be restricted within certain hours, but when the work comes in be allowed to complete it, as even then they would be well within the 60 hours per week.

I can report favourably of the way in which the Act is observed in all the other factories in Liverpool. The occupiers of the large millinery establishments are very anxious to have their hours fixed from eight to eight. They represent that these hours will be much more convenient for their workpeople, themselves, and the public; and that, with permission to work between those hours, there would be no necessity for overtime, and they would be enabled to close up the whole of their establishments at one time; that the majority of the women they employ live at some distance from the workshops, and will not come to work

---

* There has been no hostility towards the Act amongst the working printers that I am aware of, so that this observation must have reference to master printers only.—R.B.

until they have breakfasted, and consequently seldom commence until 8.30 a.m.

I think there are no other special points as far as Liverpool is concerned which I need draw your attention to. I shall have a few general remarks to offer at the end of this report, which will refer to this town as well as to others in the district.

The Workshop Act in Liverpool.

Dr. Trench, the medical officer of health in Liverpool, has been deputed by the municipal authorities to put this Act in force, and I enclose a notice which has been issued to all the occupiers of workshops in the borough of Liverpool. This notice was issued on the 6th of August last, and I called on Dr. Trench towards the latter end of September to ascertain what effect it had produced, as I understood that beyond the issuing of this notice no active steps were being taken, and it was not intended to appoint any visiting officer, but to act only in cases where information was received of any offences having been committed against the regulations of the Act.

Dr. Trench informed me that up to the time of my visit only two communications had been received, and they both had reference to crowding and want of proper ventilation.

I am afraid, therefore, that unless some more active measures are taken this notice will have no effect in stopping the long hours of labour which there is reason to believe are carried on in many workshops.

The Factory Acts in Wigan and District.

In the town of Wigan and the district round it there are between 70 and 80 factories coming under the different Factory Acts since the 3rd and 4th Will. IV., under which there are—

34 cotton mills.
2 silk mills.

These mills, having been placed for so long a time under the regulations of the Factory Act, carry them out in almost every case with great regularity. I have every reason to believe that the hours of labour are strictly adhered to. The only point on which I have discovered any failing being where, upon one or two occasions, I have found women working during meal times. The mill has been stopped, but they have remained in the rooms to set or clean their pieces. In each case of the kind, however, I have found that in doing so they have been acting against the strict instructions of the managers of the mill, who inform me that there is great difficulty in preventing the women doing this, unless they turn them out of the mill altogether, and this they are loth to do, especially in the winter. From my inspection of the school books I can report that the attendance of the children at school is very satisfactory, and those whom I have questioned show the beneficial results, as they are intelligent and quick, and their reading and writing in many cases very creditable. In fact I cannot but remark upon the clean, healthy, and intelligent appearance of the cotton operatives as a class.

Under the Factory Act Extension Act, 1867, there are in Wigan and district—

30 factories where metals are dealt with in various processes.
7 letter-press printers and bookbinders.
1 paper mill.
1 tailor's establishment (employing more than 50).

Throughout these factories I have found a pretty general and ready compliance with the Act, but in some of the smaller metal works irregularities have occurred, especially with regard to registration and obtaining the required surgical certificates. I trust that the measures I have taken in these cases will work an improvement.

There are only two of these factories where children are employed and their schooling attended to. One is an iron foundry, and the other a tailor's establishment, and there are generally but few young persons and no women employed.

Workshop Act in Wigan.

From inquiries I have made, this Act appears to be nearly a "dead letter" in Wigan. Some complaint was made with regard to its non-enforcement, and the chief of the police was communicated with, who promised to look into the matter, and see what steps could be taken; but nothing further seems to have been done in the matter.

The Factory Acts in Warrington and District.

In Warrington and the Lancashire portion of the district around it there are the following factories and other works subject to the Factory Acts passed prior to 1867 :—

6 cotton factories.
1 sailcloth factory.
4 earthenware factories.
100 fustian cutting workshops.

The remarks with regard to the Wigan cotton factories will apply to those here; and I have found but little irregularity among them, and have been in no case compelled to prosecute.

By the fustian cutters the Act is generally well regarded and carried out. This is to some extent attributable to the action taken by the fustian cutters themselves, some of the more respectable of whom have formed a committee, with the intention of compelling an observance of the Act on the part of those less well inclined, by giving information to the inspector of any cases where offences are being committed. Dr. Hardy, the certifying surgeon in Warrington, speaks in high terms of the good which has been effected by the operation of the Act among the fustian cutters.

He states that formerly the females employed in this work "were notorious for their irregular and immoral habits; but the "fixed hours of labour, and the regular discipline to which they "are necessarily subjected, have wrought a wonderful change

" for the better, and they are rapidly getting rid of the reproach " to which their occupation formerly exposed them."

Under the Factory Acts Extension Act, 1867, there are in Warrington and the district—

23 factories where metals are dealt with in various processes.
3 glass manufactories.
6 letter-press printers.
2 bookbinders.
1 cabinet maker
1 builder
1 gas works
2 breweries
1 soap works
1 chemical works
} employing 50 persons.

As a rule, the provisions of the Act are now well observed in these factories, though there has been some difficulty in the larger metal works, where the work is done by contract, in obtaining a proper registration of the young hands employed, and consequently in getting them medically examined and certified. Masters and men, however, are now getting better acquainted with the Act; and in some cases I have talked to the men, and explained to them, that if, after everything has been done on the part of the masters to enforce the carrying out of the Act on their premises, they, the men, still persist in bringing boys in to work without taking them into the office to have their names registered, they will render themselves personally liable to prosecution. I doubt not that the difficulty in these cases of contract work will soon disappear, for in Warrington, as elsewhere, both employers and employed are beginning to see the benefit likely to be effected under the operation of the Factory Acts.

There are but few children employed in Warrington, as neither factory owners or parents seem inclined to take the trouble of enforcing their school attendance.

The Workshop Act in Warrington.

The attention of the Town Council was drawn to this Act in July last by a deputation from the fustian cutters, who waited upon the sanitary committee, and urged upon them the desirability of putting this Act in force within the borough.

The Sanitary Committee appointed Mr. William Heaton, inspector of nuisances, as visiting officer, with powers to enforce a compliance with its regulations. The Town Council confirmed the appointment, and Mr. Heaton was provided with books for registering his observations, which are to be laid before the sanitary committee weekly.

I trust, therefore, the young persons and women in the Warrington workshops will reap the benefit of the Workshop Regulation Act.

Factory Acts in St. Helens and District.

Under the Factory Acts, passed prior to 1867, there are in this district only four potteries, and they call for no special remark.

Under the Factory Acts Extension Act, 1867, there are the following factories :—

15 where metals are dealt with in various processes.
12 glass works.
3 letter-press printers.
1 bookbinder.
9 chemical works } employing 50 persons.
1 builder }

There is no part in the Liverpool subdivision in which greater attention is paid, or a better feeling manifested toward the Act, than here. No children are employed in St. Helens. In the glass factories the nature of the work is such that the restriction as to half time would render their labour useless, and in the other works the labour is generally too severe to admit of their employment.

The Workshop Act in St. Helens.

No steps have been taken to enforce this Act in St. Helens. The late board of commissioners, and, since the town has been incorporated, the corporation should, have seen to the enforcement of this Act ; but doubtless the change in the governing bodies has led to the matter falling through, as the corporation has not yet had time to undertake much.

The Factory Acts in Newton-le-Willows and District.

Six cotton mills situated in Golborne and Ashton are all the factories in this district coming under the Factory Acts passed prior to 1867, and my previous remarks in reference to Wigan and district will apply to these.

Under the Factory Acts Extension Act, 1867, there are as under :—

7 factories where metals are dealt with in various processes.
2 glass works.
3 paper mills.
1 letter-press printer and bookbinder.
1 sugar refinery, employing 50 persons.

Here, again, I am happy to be able to speak favourably of the willingness and care with which the Act is carried out. In fact, as in the St. Helens district, it works so smoothly as to call for little comment.

Workshop Act in Newton-le-Willows.

As yet nothing has been done with regard to this Act in Newton.

The foregoing are the most important places in the Liverpool subdivision; besides which there are—

Widnes, with four metal works and six chemical works.
Rainford, with eight tobacco pipe makers.
Southport, with three factories.
Prescott, with seven potteries and two foundries. And,
Ormskirk, with three factories.

In all these places the Factory Acts are now in good working order.

I find, almost everywhere, that the restrictions placed on the labour of children by the Factory Acts Extension Act, 1867, has quite put a stop to their employment. The occupiers of factories brought under by this Act will not go to the trouble of looking after their school attendance; and the parents say that they earn so little money as half-timers that on their parts they would rather keep them at home and have no bother with the schooling. Of course there are exceptions to this, but I am sorry to say that at present they are rare.

The amount of ignorance among the young persons employed is very great. I think I may safely say that the majority of them can neither read or write, and but few have any knowledge of arithmetic. Of course, to some particular classes of factories these remarks will not apply, such as printers, bookbinders, military establishments, and the like; but I feel convinced that until a certain amount of schooling is made compulsory for young persons as well as children in an educational point of view the Act will fail. I find also that in other classes of factories where children have had the benefit of the schooling provisions of the Act that the good they have gained they fail to retain, owing to being released from any compulsory attendance at school after they have attained their thirteenth year. There are no lack of night schools throughout Lancashire, and I cannot but think it a pity that some provision should not be made which would insure young persons deriving the benefit they might do from attending them.

If it could be enforced that on at least two evenings in the week they should leave their labour an hour earlier, and go to these schools, obtaining, as in the case of children, a certificate of their attendance, I feel sure a great deal of good might be effected. All will be ready to bear testimony to the beneficial effects of the Factory Acts in conserving the physical strength of the young hands, but I do not think the results will be equally successful with their mental culture until the educational provisions are extended. There is but one other point upon which I would remark, and that is with regard to the inspection of machinery, and the medical inquiry into accidents. There is no doubt that the action taken in this direction has tended to diminish the number of cases of injury to life and limb to which workers in factories are so much exposed. It has induced greater care to be taken in fencing in all places of danger, and has led to the

adoption of precautions which, previous to the passing of the Act, were hardly thought of.

I think I have now touched upon all points on which it appeared to me necessary to write. If you require any further information, and will let me know in what direction, I will do my best to obtain it.

I am, &c.

Robert Baker, Esq. CHARLES R. BOWLING.

PRESTON DISTRICT.

SIR, Preston, Nov. 11, 1868.

IN compliance with your instructions, I beg to submit for your information some few remarks relative to the working of the "Factory Acts Extension Act," and of the "Workshops Regulation Act, 1867," in the Preston district, such being the result of personal observation and inquiry. My report, if it may be so called, must necessarily be brief, inasmuch as the district has but lately come into my hands, and the inspection of works consequently not altogether completed. I trust, however, that you will deem it sufficient.

The Preston district comprises, as you are aware, the counties of Cumberland and Westmoreland, and the greater part of the northern division of Lancashire; Preston being the most important, indeed the only purely manufacturing town in it. Here, however, the works coming under the Extension Act being comparatively insignificant, my remarks will treat of the district as a whole, no one part of it calling for special attention.

That the Act has been received in good spirit by employers can be best gathered from the satisfactory reports which you have weekly received from me, and the notable absence therefrom of any irregularity, so much so that in no single instance have I felt myself called upon to recommend that legal proceedings should be taken.

The number of works coming under the Act in the district is about 200. These being for the most part places where metal is dealt with in various ways, the amount of female and young labour brought under supervision is not large.

As regards that most important point, the employment and education of children, the immediate consequence of the introduction of the Act was the discontinuance of their services where such could be at all dispensed with, employers being afraid of the responsibility involved by the half-time system, in the country districts (and it is to such that the employment of children has been almost entirely confined, the nature of the works in Preston rendering their labour useless). The result, therefore, has been not otherwise than beneficial, schooling being attended to by parents so much more carefully in such districts than in towns. In some cases, however, the half-time system has from the first been adopted, and, from what I hear, with perfect satisfaction to employers. In a very few cases it was, after a

short trial, given up, difficulty being found in procuring the regular attendance of the children at school. In only one case have I met with a voluntary system of education. In this case, if I remember right, the attendance at school of all children under 14 years of age is enforced, to the great benefit, moral as well as physicial, of those concerned. In the majority of cases I find that those employed as half-timers in works coming under the Extension Act, are now attending school for the first time. I lose no opportunity of pointing out to employers the great advantages to be derived from the employment of children as half-timers, and I have reason to hope that the system will soon be more generally adopted. The number of children employed as short-timers in this district is about 100. Of these there are employed in tobacco manufactories about 15, in paper mills about 34, in bobbin manufactories (where 50 or more persons are employed) 31, and in other works about 20. There are included in the number about 25 girls, nearly all of whom are employed in paper mills. In no works has the Act been of greater service than in tobacco manufactories, the work in such being most deleterious to health, and young labour much employed. In several works of this nature artificial power is being now applied to the processes till lately undertaken by children.

As regards the "fencing of dangerous machinery," I have, as a rule, found that proper precautions against accident already exist; and, in all cases, I have found employers willing and anxious to comply with the requirements of the Act on this point, and glad to adopt any plan I might suggest for the better preservation of the limbs and lives of those in their employ. Of 55 accidents which occurred in works coming under the Factory Acts Extension Act during the quarter ending the 30th of September, I find by the reports that only nine were what may be called "machinery accidents." By far the greater number occurred in the large iron works in Cumberland, and were occasioned in many cases by falls of heavy pieces of iron, and in not a few cases by burns from the molten metal. In some of these works a printed form for notifying to the certifying surgeon the name and address of the injured person has been adopted; a plan which insures observance of the law on this point. I have not unfrequently heard complaints of the requirements of the Act as regards holidays. In most factories I am given to understand that the number given to young persons individually has always exceeded the stipulated eight half days, and employers say that to send all away together involves a complete cessation of work; hence their objection to doing so. Of course this argument would not hold good in all works. Complaints have emanated chiefly from paper mills, and works where female and young labour is much employed, but in these, as in other factories, the law has been complied with.

On the whole, as I said before, the Act has been most favourably received. This is due, in great measure, doubtless, to the fact that in this district the ordinary mode of working has been but little interfered with by its provisions, but it is also due to

the good sense and proper feeling of those affected by it. I have received the greatest assistance from the gentlemen acting as certifying surgeons throughout the district.

With regard to the Workshops Regulation Act, that any great good has resulted from it I am not prepared to say. My time has been so fully occupied with business connected with the Factory Act I have not been able to give it the attention I should have wished. From inquiries, I have, however, ascertained that in the larger towns the local authorities have caused printed abstracts of the Act to be distributed among the places subject to its provisions, and doubt not that good will ensue, though that the law is being strictly observed, I consider extremely doubtful; and to secure the regular attendance of children at school will require more attention than the local authorities have at present brought to bear in the matter.

I remain, &c.

R. Baker, Esq. G. T. Faussett.

North Irish District.

Sir, Belfast, 28th September 1868.

I have just completed a tour of inspection over nearly the whole of my subdivision, during which I have paid particular attention to the works coming under the Factory Acts Extension Act, 1867, and am therefore in a position to report to you upon the working of that Act in the North of Ireland.

My subdivision, as you are aware, includes the whole of the province of Ulster and the county Louth, the principal part of it being the large manufacturing town of Belfast. Prior to the passing of the Extension Act there were in this subdivision 350 factories under inspection; now there are more than 600.

The "new works" include 80 letter-press printing offices, 40 iron and brass foundries, 30 machine and metal works, 30 tobacco manufactories, and 25 sewing factories.

Of the letter-press printing, about one-half are newspaper offices, and in these the law has worked greater changes than in any other class of factory. In order to get out the newspaper at as little cost as possible, the great majority of the workers are boys under 16. The daily papers are of necessity prepared and printed at night, and formerly these young lads were employed every night, except Saturday, from 6 p.m. to 5 a.m. The employers have transferred all under 16 from the newspaper to the jobbing offices (where they work in the daytime only), or else they have divided the young persons into two sets, and work them in the night on alternate weeks. In the tri-weekly newspaper offices the boys were accustomed to work 18 hours at a stretch on the days previous to publication. This is now obviated by working one-half of them in the daytime and the other half at night. With regard to the weekly newspapers all the proprietors are under promise not to work boys under 16 during the night previous to the day of publication, as formerly, and I trust

this will be carried out without the necessity of prosecutions, though I am by no means sanguine as to some of those in the country towns. Letter-press printers, as a rule, were more opposed to the operation of the Act than any other class of manufacturers. They had become so accustomed to the long hours of labour that they feared the Factory Act would render it impossible for them to carry on their work without loss; would be a serious obstacle to the employment of apprentices, thereby checking the supply of men for the trade; and would prevent the boys from earning sufficient money to support themselves. One of our most intelligent newspaper proprietors argued that as it required seven years apprenticeship to obtain a thorough knowledge of newspaper work, the restriction to alternate weeks for the night work would necessitate a service of 14 years as an apprentice. They chose to forget that the reproach of their trade is that it is a very unhealthy one, and that a healthy middle-aged working printer is a curiosity, the unhealthiness being caused mainly by the long hours and the constant night work. By a little alteration in the system of working, and the employment of an extra boy or two, they are enabled to get the work done in a smaller number of hours, and without much of the hurry and drive consequent upon everything being left to the last minute; while to the boys it is an unmixed benefit, for instead of injuring their health and eyesight by invariably working in the gaslight, they now do half their work at least, and many of them all of it, in the broad daylight. In July 1870 this rule will apply to all boys under 18; and I believe that the improvement in the system of working thus introduced will eventually extend to all classes of printers, for when once it is found that the old custom was not a rightful sovereign but a bad tyrant, from whom it only requires an effort to get free, that effort will be made. It is a great pity that the limewashing and painting clauses of the Factory Acts are not enforceable in letter-press printing offices, for they are, as a rule, the dirtiest places imaginable, the walls black with dirt and smoke, the ceilings hung with cobwebs and other excrescences, and the windows nearly impervious to light. Health, comfort, cleanliness, and utility demand that the limewashing should be done; but here again bad habit reigns supreme, and needs to be overthrown by a beneficial law.

The numerous large iron and brass foundries and machine and metal works in my subdivision give me very little trouble. With the exception of a few rivet boys, the young persons employed are all over 14 years of age, and the hours of labour have for years been regular (6 a.m. to 6 p.m., and 6 a.m. to 2.15 p.m. on Saturday). Overtime was formerly occasionally worked; but the masters are very glad of a law which gives them a pretext for refusing all overtime, as they say it does not pay. In the smaller establishments of the same sort the Act has been of great service. The staff usually consists of the employer, a journeyman, and three or four boys. Overtime was very prevalent, meal-times little observed, and very young lads were

employed. Now all is changed, and the workers in these shops are placed on an equal footing with those employed in the large and well-regulated foundries and machine works.

In the tobacco manufactories of the North of Ireland females are not employed. The tobacco is chiefly of the roll or pigtail sort, and out of every 100 workers 20 would be adult males, 40 boys between 13 and 18, and 40 boys between 8 and 13. The work is not very laborious, and the hours of labour are usually not more than 40 or 50 in a week. The men, or spinning masters as they are called, make the tobacco by piece work, and they pay the boys, The work is purely mechanical, and could be performed as well by a cleverly trained dog or monkey as by a human being; and the boys are consequently taken from the poorest and most neglected class, and paid the lowest possible wages. In the large towns, such as Belfast and Londonderry, it is no libel to say that the tobacco boys are the worst of the worst,—rogues, beggars, and street arabs. They are continually changing their places of work; here to-day and gone to-morrow; and when the Act first came into operation, the manufacturers complained of the trouble of keeping the registers and of procuring surgical certificates. The Act, however, by introducing a system, and by giving an importance and status to each boy, has had a tendency to check their roving disposition; and the manufacturers express themselves very pleased with its operation, as they think it will introduce a better class of workers, make them more regular in their habits, and lessen the robberies to which every tobacco manufacturer is a victim. I regret to say that in those cases where boys under 12 years of age were employed the masters have refused to adopt the half-time system, and have ruthlessly sent the little fellows into the streets, and taken on older boys in their places. The trade is just now in a very low condition in Ireland, owing to the recent excise disclosures of numerous cases of adulteration in Irish tobacco having spoilt the sale in the English and foreign markets. My hope is that when trade revives the demand will be so great that the little boys must again be employed, and the compulsory educational clauses of the Factory Acts carried out. The boys were those of all others who most need education, and the half-time system is well suited to the trade, only requiring a start to become universal.

Of all the works under the Factory Acts Extension Act, 1867, in my subdivision, the shirt factories are the largest and most important. Londonderry and Belfast are the principal seats of this trade, and in these towns many thousands of women and girls are actively engaged, in beautifully clean and well-ventilated factories. The sewing machines are mostly driven by steam. The hours of labour have usually been nine hours a day, between 9 a.m. and 7 p.m.; and the only alteration required by the law was that the time should be taken an hour earlier in the day, a change which has been strictly carried out and generally approved. Although these factories are as a rule so well regulated, yet the baneful system of overtime had crept

in, and in busy seasons very late hours were kept. Moreover, when a holiday was given, the workers had to make it up by overtime. I have only heard one complaint of the stoppage of this system by the Act. Mr. Hogg (McIntyre, Hogg, & Co. of Londonderry) states that some special branches of his trade are leaving Derry, and going to France, because he is not able during the season to do the work in the restricted hours. I pointed out that his workers lose two hours per day in the morning, and that there is no objection to a large increase of his splendid factory, and of the number of workers. A vicious system is being introduced into some of these sewing factories, of supplying women at their own homes with machines, and allowing them to take work home to do after factory hours. A few shirt factories in the rural districts have been very beneficially affected by the Act, for in these long and irregular hours were the rule, not the exception.

Of miscellaneous works coming under the law by reason of employing more than 50 persons, next to the sewing factories, the principal are factories for the handloom weaving of linen and damask, fancy box and ornament making, and brick and tile works. The hand-loom weavers are mostly old men and women, with a few young persons to wind yarn upon the bobbins for them. The wages are very low, and the hours of labour have generally been regulated by the daylight. The Act has not been long enough in operation for the women to appreciate the benefits resulting from it; for the present they can only see that it has a tendency to reduce their wages, and consequently they are not much impressed in its favour. Mr. Kelly of Newferry told me that he found the pieces of cloth were brought in as quickly as before the alteration. The fancy box manufacture is entirely dependent upon the linen trade. Orders can be executed with very great despatch, and before the Act came into operation night work and irregular hours were thought to be necessary evils. The employés are all females. Now, when a linen merchant demands boxes to be made at unreasonable times and very short notice, the makers point to the abstract of the Act, and show him that their workers are protected in the same manner as his mill, factory, or warehouse girls. The manager of one of these concerns told me that he was able now to get more work done and at less expense.

I have now visited nearly all the factories and other works in my subdivision more than once, and some of them three or four times. The increase of works obliges me to visit towns and districts where my predecessor had no occasion to go, such as Bushmills, Omagh, Enniskillen, Cavan, Carrickmacross, &c., and the Extension Act has doubled the number of works under inspection in Belfast. I believe I may say that the new Act is now in fair working order in the whole of my district, all the works placed under it, and all the manufacturers acting in conformity with its regulations, or under promise to do so.

The "Workshop Regulation Act, 1867," is a dead letter in the North of Ireland. On June 20th I called upon the town

clerk of Belfast with a copy of the Act, explained its provisions, and promised my assistance in enforcing them. He laid it before the mayor and council, and has since informed me that they were indisposed to take any active steps or to incur any expense in the matter, unless their attention was specially directed to a bad case. I have forwarded copies of the Act to the local authorities at Londonderry, Strabane, and Dromore, with a like result. Very great complaints are made by those manufacturers, whose premises come under inspection because of the employment of more than 50 persons, of the unfair advantage in competition given to those in the same trade who employ less than 50, and are therefore exempt from the restrictions of the Factory Acts. In some instances it acts with peculiar hardship; *e.g.*, in Strabane and Dromore there are in each respectively two shirt factories, one under the law, one exempt. In Ballymena two hand-loom weaving factories are similarly circumstanced. In Londonderry, 10 of the largest and best-regulated shirt factories are under the Factory Acts Extension Act, 1867, and five or six smaller ones exempt. The proprietors of the latter boast of their freedom from legislative interference, and tempt some of the best workers away from the larger establishments, with the bait of more work and more wages; a bait which they are short-sighted enough to accept. In Belfast there are eight sewing factories with more than 50 hands, half a dozen others with from 40 to 50, and 20 smaller ones. The fancy box-makers, too, have had journeymen leave them, and set up in business on their own account, ostensibly for the purpose of executing orders at the shortest notice, not being restricted to factory hours. These anomalies create a great dislike to the Factory Acts, which would otherwise work well and harmoniously.

I have everywhere met with the greatest courtesy and attention, the manufacturers and managers having shown themselves anxious and zealous to carry out the requirements of the law, and to render my duty a pleasant one. The certifying surgeons have afforded me valuable assistance in finding out and informing me of new works, and in explaining the books and papers to the manufacturers. Dr. Purdon's help has been especially useful, he being a perfect encyclopædia of information in everything relating to Belfast, its people, and its factories, old and new.

I take this opportunity of calling your attention to a very pleasing fact in connection with the flax-spinning mills in North Ireland, viz., that whereas in 1862 there were only 590 half-timers employed therein, in 1868 there are 1,300 (900 in Belfast alone), the greater part of the increase having taken place during the present year. D. C. Richmonds, Esq., an assistant commissioner of the Royal Commission on Primary Education, is now in Belfast, and has promised, when pursuing his inquiries, to pay particular attention to the half-timers, and to consider whether the obstacles to a great extension of the half-time system, now existing, in the inconvenient school hours, &c., cannot be removed.

Flax being very scarce and dear, and the price of yarns and linens ruling very low, the staple trade of Ulster is at present

rather depressed, and serious thoughts are entertained of working short time. The trade is now suffering a reaction from the extraordinary activity which prevailed during the American war.

I beg to thank you, Sir, for a copy of the Birmingham Daily Post of September 17th, and to remain,

Yours, &c.,

Robert Baker, Esq. W. Dawkins Cramp.

North Birmingham District.

Sir,

In accordance with your wish, I beg respectfully to submit the following report on the general working of the 'Factory Acts Extension Act" in the North Birmingham district, which has been assigned to me. I conceive the object of this report is as far as possible to elucidate the general feeling of manufacturers as regards the Act itself, to state the several objections which have been made and the remedies which have been suggested by the manufacturers themselves, in the course of conversation (in most cases without any solicitation on my part), and to describe any difficulties I may have met with in the application of the "Act." I shall therefore note the objections simply as represented to me, without attempting to commment on them myself.

With the exception of a few factories under the Textile Act devoted to the manufacture of rope, elastic webs, and felt, and a few under the Act of 1864, in which the manufacture of lucifer matches, tobacco pipes, casting pots, and percussion caps, is carried on, all the remaining factories in my district have been brought under the law by the "Factory Acts Extension Act, 1867." The general principles of this Act have on the whole been well received; but at the same time strong objections have been raised in some quarters as to some of its details.

Previous to the application of the Act, 1867, to Birmingham, the hours of work in the different trades were generally late. The hands in many cases not commencing work before seven or eight o'clock in the summer and nine or ten o'clock in the winter. The sudden change, therefore, from these late hours to those allowed under the "Factory Act" has been felt in many cases to be a great inconvenience. I ought here to mention that under the old system, before the application of the Act, work was continued up to seven and eight o'clock in the evening all the year round, and, when trade was busy, even as late as nine and ten o'clock at night. The fluctuation of trade, and the short time allowed by contractors for the completion of large orders, will account for these late hours; and overwork, when trade was "brisk," has been deemed to be a natural compensation for short hours when trade was "flat." The occasional break down of an engine, and the consequent temporary cessation from work, has also generally been followed by the adoption of long hours of work to overtake the time which was lost. On this head complaints are often

made that the "Factory Acts" make no provision for such an emergency as the break-down of an engine, by allowing overtime work. The same complaint applies to the case of contractors, who give large orders without allowing sufficient time for their completion. It is to be hoped that contractors will soon be obliged to acknowledge the existence of the "Factory Acts," and of regular hours of labour, and be induced to issue their orders at an earlier date. An order to be executed at short notice, and which is dependent on the sailing of a ship, presents perhaps a problem more difficult of solution, for "time and tide wait for no man." Another frequent cause of complaint is the "payment of surgeons' fees." The objectors contend that it entails a heavy tax upon manufacturers, especially in Birmingham, where the young lads from 12 to 16 years of age are continually changing from one factory to another, for a surgeon's certificate granted at one factory will not avail a young person on accepting employment in another. As a remedy, it has been suggested that, either the surgeon should be paid by the government, or the young persons be examined at the surgeon's house (in which case the fee would be less), or the period during which a young person can work without a certificate be extended from one week to three weeks or a month, so that a greater number might be examined at each visit of the surgeon. This latter suggestion is often made by employers of skilled labour, such as jewellers, for instance, who state that a week is not sufficient time to judge of the capacity or incapacity of a fresh hand. I have frequently made inquiries as to the cause of this "continual" coming and going amongst the young persons, especially the male young persons between the ages of 12 and 15 years (for at the age of 16 years of age they generally begin to steady and settle down), and I find the principal reasons are, 1st, an increased scale of wages offered by some other manufacturer, who has perhaps a large order, and requires a temporary increase of hands, or, 2ndly, disagreement (if not actual illtreatment) between the lads and the men under whom they work. In many trades, where the men are paid by the piece, they engage and pay the lads themselves, quite independently of the manufacturer or owner of the factory; in other trades the boys are paid directly by the manufacturer himself, and in consequence are far more fixed and steady in their habits.

A petition was got up some time since by one of the principal brass founders in favour of an extension of hours of work to women engaged in the lacquering trade. Almost all the opinions I have heard expressed on that point have been to the effect that no real grievance existed.

The gun trade, one of the most important in Birmingham, and which employs perhaps as many boys as any other of the metal trades, is as yet but little affected by the Act. It is only the larger factories, in which the many different processes connected with the manufacture of a gun are combined under one roof, which come under the Act. This is much to be deplored, as amongst the smaller gun makers the hours of work are very irregular; the men prefer to play (*i.e.* take a holiday) on Monday

or Tuesday, and then put off the greater bulk of their work to the latter end of the week, when they are compelled to work very late hours in order to complete their orders by Saturday. In a great many of the gun factories the workmen are quite independent of the owner of the factory in which they work. Each man rents his "stand" (by the term "stand" is included a vice, bench, and gas jet), and is at liberty to work for any one he pleases. Whenever, therefore, the smaller gun factories may be brought under the "Act," each of these workmen would have to be made individually responsible for its observance.

But this leads me on to the subject of the "Workshops" and the "Workshop Act." I can safely say that the "Workshop Act" in Birmingham is a dead letter. Some have never heard of it; few, if any, understand its regulations; and no one that I have met with carries it out. This state of things naturally causes a strong feeling of dissatisfaction amongst manufacturers. "Why," says a button maker, with 50 hands, "am I obliged to leave off work at six p.m., whilst my neighbour in the same trade who employs 45 can work as late as he likes?" In some cases the women and young persons will leave the factories, and go and engage themselves at a neighbouring "workshop," where, by working longer hours, they can make more money. From time to time I receive anonymous letters on the subject of overtime work, and in almost every case I find the "delinquent" to be the owner of a workshop, and whom, therefore, the "Factory Act" cannot touch. Again, "contractors," finding that longer time is required for the execution of their orders in establishments under the "Factory Act," which is enforced, transfer their patronage to smaller establishments under the "Workshop Act," which is not enforced. I need hardly add that long hours of work are more prejudicial to health in the small and confined space of a workshop than in the larger and better ventilated rooms of a factory. Supporters and opponents of the "Factory Act" seem agreed on this point, that if the principles of the "Factory Act" are to be fairly applied to the trade of this country its "area" should be extended. Whatever factory I enter, the same opinion everywhere exists, that the "Act" remains an injustice until it is applied to all alike (*i.e.*, factories and workshops).

As regards education, I am obliged to state that the "half-time system" in this town has been hitherto a failure. I have sent out circulars to the different schools in my district, inviting information as to the working of the half-time system, and I must regret that only twelve schools have hitherto answered my inquiries. The total number of half-timers attending these twelve schools is 90 (46 boys and 44 girls) which gives the small average of seven to each school.

This may be accounted for as follows:—Trade is still in a depressed state in many parts of the town, and has been far more so than it is at present. A great many of the factories are therefore only partially full, and the manufacturers can afford to dispense with the services of the half-timers. In a grate many trades children under 13 years of age, from a deficiency of

strength, are not suited to the work, and the manufacturers are not sorry to find an excuse to get rid of them, and at the same time of their responsibliity in seeing that they attend school.

I am doing what I can to induce the factory lads between 13 and 18 to attend night school. Since the introduction of the "Factory Act" they enjoy more leisure in the evening than was formerly the case, and it would seem advisable, as far as possible, to regulate and utilize that leisure by a weekly attendance of two or three nights at school. The total average daily attendance in the 12 schools mentioned above for the half year ending with July 1, 1867, was 2,868 (boys and girls), whilst for the same period in 1868 the average amounted to 3,391; thus showing a superiority of 18 per cent. of attendance in 1868 over that in 1867. It is possible that the half-timers who have been dismissed from the several factories may have helped to swell this increase in attendance.

In connection with the workshops (alluded to above), I ought to mention that parents have often, of their own accord, taken their children under 13 years of age away from the factories, and re-engaged them in workshops where they can work whole time, and consequently earn full wages.

My former remarks as to "workshops" are based on the existing state of things, viz., that the "Workshop Act" is a "permissive Act" which is left to the local authorities to enforce, who have hitherto failed to do so; but even should the "Act" be enforced, as the "Factory Act" is, the objection would still remain, that it allows a larger period during which work may be carried on than the "Factory Act;" and manufacturers in certain trades who employ 50 hands would still be tempted, by the dismissal of one or two, to withdraw themselves from the operation of the "Factory Act," and to put themselves under the "Workshop" Act. I have given in detail the various opinions I have heard expressed by manufacturers, and although these opinions may often seem to be impracticable they may still be valuable as affording a manufacturer's view of the question.

I am, &c.

Robert Baker, Esq. THURLOW ASTLEY.

SOUTH IRISH DISTRICT.

67, Upper Sackville Street, Dublin,
Sir, 31st July 1868.

Since I was appointed to this subdivision in April last, I have visited the principal towns in the district, making Dublin my residence, and have inspected all the known works (both new and old) in Cork, Limerick, Galway, Waterford, Kilkenny, Drogheda, Clonmel, &c., &c.

With regard to old works, the number (as well as I can ascertain) is 101, viz:—

75 textile.
14 tobacco-pipe.
11 potteries.
1 lucifer matches.

Of the 75 textile factories there are,—

53 woollen.
10 flax.
7 cotton.
3 jute and tow.
1 worsted.
1 hosiery.

Many of the woollen factories are very small, and, with few exceptions, this branch of Irish industry is not in a prosperous state. On the other hand, the flax manufacture (though there are at present but 10 factories) seems to be thriving, and likely to increase. The principal firms are Gradwells & Chadwick of Drogheda; Malcolmson, Brothers, of Carrick-on-Suir; J. Shaw and E. Shaw & Co., of Celbridge; and the Flax Spinning Co. of Cork. There has been a new cotton factory opened by Messrs. Nash & Bridge at Cork.

With regard to new works (under the Factory Acts Extension Act, 1867), the number I have at present visited is 338, consisting of,—

Letter-press printers	111
Iron, brass, &c. founders, &c.	66
Tobacco manufacturers	46
Paper makers	15
Bookbinders	14
Glassmakers	7
Staymakers	6
Miscellaneous trades	73
	338

Of these, the most important, as employing females and young persons, are the staymakers and the tobacco manufacturers; the first employing 2,000 females, and the latter 1,000 boys under 16. By the workers generally in this part of Ireland the extension of the Factory Acts has been welcomed as a boon, and by none more so than by the females, great numbers of whom are employed in staymaking, millinery, evelope making, bookbinding, &c., &c.

At first there was a disposition in Dublin, especially among the letter-press printers, to agitate against the Act, but, owing to the relaxations granted by the Secretary of State, that feeling has in great measure subsided; and I think, generally, that the employers admit that the Act will work beneficially. The half-time system is not likely to be adopted in any of the new works, unless it be in the extensive tobacco factory of Clark & Son, at Cork. The only old works in which half-timers are employed are those of Malcolmson, Brothers, at Portlaw and Carrick, and of J. Shaw and E. Shaw & Co. at Celbridge.

Owing to the number of new works, and the great distances between the localities, I think this subdivision is beyond the compass of one sub-inspector. In Dublin the assistance of

Dr. Monks in putting the Extension Act in operation has been most valuable.

The Workshops Act remains at present a dead letter in the South of Ireland, but I am informed by the town clerks of Dublin and Cork (whose letters I enclose) that steps are about to be taken to put it in operation.

I am, &c.,

Robert Baker, Esq. JOHN H. BIGNOLD.

SOUTH BIRMINGHAM DISTRICT.

SIR, Birmingham, Sept. 1, 1868.

HAVING now made myself tolerably well acquainted with the subdivision under my care, and feeling satisfied that I have visited, and placed under the provisions of the Factory Acts, all the works of any magnitude, and nearly all the smaller works to which they apply, I am enabled to form some idea of their suitability to the manufactures of this town, which are remarkable for their variety.

Having conversed with a great number of manufacturers, I have had an opportunity of hearing any objections which may be urged against the law. These have been but few, and made chiefly by persons who thought the law quite unnecessary in their own case, though much wanted in some of their neighbours' works.

You are already aware that some few brassfounders allege the necessity of being allowed to lacquer work after the usual hour. One or two fire-iron manufacturers also wished to be allowed to oil their work after 6 p.m. These are the only instances in which any exigency (that has not already been provided for) has been alleged for a relaxation of the rules, although many have expressed a wish to be able to work overtime in case of sudden or large orders.

Letter-press printers, whose customers have been in the habit of sending orders late in the day, and who consequently feared a loss from being obliged to refuse such orders, are all observing the hours, and I have not heard of any material inconvenience arising therefrom.

Some few instances of slight opposition to the Act I have by firmness and patience surmounted without having recourse to prosecution, and am happy to say that the law has been put in force without any opposition or dislike being raised by the manner of its application, only two prosecutions having occurred.

From personal inspection, I can assert that the law is now in full operation in all factories, most instances of alleged infraction proving to be in places under the Workshop Regulation Act, which is in the town a dead letter. In consequence of this, many complaints arise from "factory" owners, who are thereby placed at a disadvantage in this respect, viz., the workpeople, particularly females, who have in Birmingham been accustomed to work usually from 8 or 9 a.m. to 7, 8, or 9 p.m., do not, in some instances, like to change their hours (though eventually they

prefer the new regulations), and will leave a factory where they have to work from 6 to 6, and go to a workshop where they can do as they please.

Thus some of their best hands are lost to "factory" owners, especially those whose wages are paid at the lowest market rate.

There has been considerable dissatisfaction created by manufacturers having to pay the certifying surgeon's fees, and certainly in small works they seem to press rather hardly at a time when profits are small. In the case of a number of poor workmen who rent steam power I could scarcely have carried out this portion of the Act had it not been for the liberality of the certifying surgeon, W. Wade, Esq., M.D.

Owing to the dullness of trade which prevails, but few children under 12 are now employed, many employers having taken alarm at the supposed trouble of half-timers, and others having beeu glad to reduce their hands; thus comparatively few half timers are now attending school. I have reason, however, to think that the ordinary school attendance throughout the town is considerably increased, and am collecting information on this point, which I shall forward to you in due time. The very fact of schooling being required of factory children has turned public attention to the subject, and led to good results. I feel sanguine as to the prospects of this branch of the Factory Acts. It is much to be regretted that the attendance at night schools of young persons, say from 12 to 16 years old, is not compulsory. I hope, however, to get a large number of such to go to school next winter, having had many promises of co-operation from employers, most of whom seem alive to the necessity of education for the working classes, if we are to maintain our manufacturing pre-eminence.

A very important trade of this town, namely, the gunmaking, almost entirely escapes the Factory Act Extension Act, few employing 50 hands on the premises. The number of small boys to be seen carrying heavy loads of gun materials through the streets at late hours testifies how much supervision is needed, as I may also say it is in mother-of-pearl manufacture and bootmaking, which, for the above-mentioned reason, are free from all control.

In conclusion, I beg to inform you that I have had a large number of shaftings, bands, and cog wheels fenced, the necessity of which many persons are unaware of, though there have been two severe and one fatal accident since January 1, 1868, in South Birmingham alone.

I have also had several nuisances abated; and as the town is losing its former good character for healthiness, shall in future pay particular attention to this subject, and increased attention to the cleansing of factories.

I remain, &c.

Robert Baker, Esq. W. H. Johnston.

P.S.—There are many brickyards which appear to require regulation very much.

West Bromwich District.

Sir, West Bromwich, 13th Oct. 1868.

I write to offer you a few remarks on the working of the Factory Acts Extension Act, and the Workshop Regulation Act, in my district.

This district, comprising the greater part of the new borough of Wednesbury, together with Handsworth, Smethwick, Bilston, and some outlying places, is a very populous and important one. And, as I have resided in it about eight months only, I may not have acquired a full knowledge of the details of the several trades (so far, that is, as they will be affected by these Acts), and my report must therefore be, to a certain extent, incomplete.

The Workshop Regulation Act is, as far as my district is concerned, a dead letter. The local authorities make no attempt to carry it out, and the medical officers of the local boards dare not incur the enmity that would be caused by their trying to enforce it. They are not sufficiently independent. This is very unfair to many who are under the Factory Acts Extension Act, and much discontent arises. Many occupiers have stated that they quite agree with the provisions of the Factory Act, and consider them very beneficial, but they feel it hard that their next-door neighbours may work women and children as long as and whenever they please. And this is especially the case with the brickyards. There are a great many brickyards with from 20 to 45 workers. In these women and children are employed at 8 o'clock at night and on Sundays. If no other small works are brought under the Factory Acts, all the brickyards, at any rate, ought to be placed on the same footing. Children have been taken into brickyards, and employed all day in hot stoves, at the age of five years; consequently a very large majority of those employed in the manufacture of bricks and tiles can neither read nor write.

The Factory Acts are almost quite new in this district. With the exception of one or two ornamental tile works, regulated by the Act of 1864, no works were under factory legislation till the beginning of the present year. It is impossible, therefore, in so short a time, to form a complete opinion. But, as far as one can judge at present, the extension of the Factory Acts into this district has been very successful. The occupiers have, with some few exceptions, been generally willing to comply with the provisions of the Act, while some have given that assistance without which it would be difficult (especially in large iron mills) to carry out the law fully. Various causes, however, and notably the extreme depression of trade, have prevented a complete test of the operation of the Acts. But I have great hope that when the real benefits of the Factory Act are better known both employers and employed will heartily co-operate in carrying out its provisions.

Not much has been done in the way of education, and for various reasons. The limit of 13 is not reached for two years;

almost all the employers at once dismissed all children who required schooling; and the stagnation of trade enabled them to do this, as there were others to take the place of those dismissed. Already, however, in some works the want of children is felt, and the half-time system is being tried in about half a dozen factories. But I do not think that system can ever be carried out fully in this district. Most of the young people are employed at blast furnaces and iron mills, and must work what are termed day and night shifts. Now the law allows no one under 13 to work at night; consequently very few under 13 can be employed at all in those works, since those who have the day turn one week have the night turn the other. If, therefore, education (of which there is the most urgent need) is ever to be carried out here, I think that nothing will effect this except a compulsory system of sound elementary instruction up to the age of 13. This plan need not interfere with the half-timers, who are already compelled to attend school. There is also a great want of schools, and many children who have been dismissed are neither at work nor at school, and are thus a burden to their parents, without deriving any benefit themselves.

Some of the japanning factories are dirty and ill-ventilated, especially the rooms in which blank trays are stamped. The same remarks will apply to rooms where hollow-ware is turned. In fact some of these places seem scarcely fit for any one to work in. In many foundries, too, there appears to be a system of ventilation which, while it lets in abundance of cold wind on the workers, fails in removing noxious vapours. A few works had the machinery, &c. well guarded, but in the majority a great deal of fencing was required. This is now carried out tolerably well, though some managers have an extraordinary objection to putting up even the simplest kind of fencing.

In many works the Factory Act has already produced more regularity in general, to the great satisfaction of the employers.

In conclusion, I may state that, though much remains to be done, and many difficulties are still to be overcome, the prospect is very hopeful.

I remain, &c.,

Robert Baker, Esq. G. Ilderton Seaton Blenkinsopp.

South Wales District.

Sir, Mumbles, Swansea, 20th Nov. 1868.

The number of new works brought under inspection by the Factories Act Extension Act, 1867, is 236 at the present moment. It is, however, probable that others will be found in the course of the next few month. In order to place the district before you as plainly as it is possible to do upon paper, I will classify the different works as under, viz.:

98 Iron mills and foundries.
61 Printers and bookbinders.
24 Copper mills.

24	Tin-plate works.
6	Railway works for fittings, &c.
5	Silver works.
5	Spelter works.
4	Docks and shipbuilding yards.
3	Chemical works.
2	Patent fuel works.
1	Glass works (not in operation).
1	Paper mill.
1	Wire rope manufactory.
1	Tobacco manufactory.
Total 236	

Of these works the greater number are situated in or near the following towns, viz. Swansea, Neath, Aberdare, Merthyr Tydfil, Dowlais, Cardiff, and Llanelly. All the towns I have mentioned, with the single exception of Llanelly, are situated in Glamorganshire, and, looking at the number and importance of the works, the bulk of the inspection in the South Wales subdivision may be said to lie in that county, which, for its mineral wealth, and for the industrial energy of its inhabitants, as shown in the development of it, must be ranked first in the principality.

I regret that it is not in my power to give a tabular statement of the number of young persons employed in this district, inasmuch as the minutes of first inspection had for the most part been forwarded to the Factory Office before my arrival in Wales. The only works in which young persons are employed in any large numbers are the tin-plate works, and in those a large proportion of them are females. In the tin works the Act has done much good by preventing the employment of children of very tender age. On the occasions of my first visits I found large numbers of children between the ages of nine and eleven working full time, not only in the tin works but in the iron mills also, and in the latter works by night as well as by day. I am happy to say that these very small boys and girls have now entirely disappeared from among the workers; and at this moment it would, I believe, be a difficult matter to find in any of my new works a single boy or girl who has not been passed for twelve by the certifying surgeon. The effects of the bad old system are, I grieve to say, painfully apparent in the emaciated appearances and stunted growths of the rising generation in the iron districts of South Wales; indeed, so small in stature are some of the young persons presented for examination that the certifying surgeons have found great difficulty in passing even those whose ages entitled them to certificates, and have largely availed themselves of the requisitions for obtaining exact dates of birth. As a sanitary measure the Act is admitted to be a good one, even by those upon whom it has entailed the greatest amount of trouble and expense; but, as an educational measure, the same people believe it to be a failure. It is certain that up to the present time the effect of it in South Wales has not been to create half-timers,

and to make labour and education go hand in hand. I have as yet only one factory in my subdivision in which half-timers are employed; nevertheless I am of opinion that the Factory Acts Extension Act, 1867, will not be fairly upon its trial until the modification expires which permits the employment of children of 12 years of age full time. There are in my works a very large number of children between 12 and 13, and it has yet to be seen whether the iron masters will be able to dispense entirely with their labour, or willing to pay the extra wages necessary to secure the services of older persons. At present the millowners are averse to the adoption of the half-time system. They say, it would give them a great deal of extra trouble, and render them more liable to prosecutions for infringements of the Act. I myself incline to the belief that they will make some pecuniary sacrifices rather than adopt it, and that nothing but the actual want of labour will cause them to do so.

I have, as a rule, been met in a very good spirit by all those occupiers of works with whom I have been brought into contact; and even in the few cases in which I have been compelled to prosecute I believe the infringements of the Act were due to neglect and apathy rather than to any wish to evade the law.

Much has been done in the way of fencing machinery; much yet remains to be done, in very large works, such as those at Dowlais, Merthyr Tydfil, Swansea, Aberdare, and Llanelly. Fencing the machinery must necessarily be a work of time. I may, however, say that I have already got more done in the way of protection than the Act would have enabled me to insist upon. Section 21 of 7 Vict. cap. 15. is somewhat weakly worded, and if there had been any determined opposition to the Act much dangerous machinery which is now guarded must have been left unprotected.

Though from the nature of the work the accidents in this district must necessarily be rather numerous, I am glad to observe that up to this time those which have occurred have been for the most part of a trivial nature. The two most fertile sources of accidents are the "water boshes" and the "shears." They are difficult to protect without at the same time interfering with the work carried on. I have, however, given my serious attention to the matter, and it is now under discussion by some of the most ingenious of the mill managers in my district. I have offered several suggestions for their consideration, and hope in a very short time to have it in my power to report favourably on the subject.

I am glad to be able to report that the employment of women at night has entirely ceased, except in the blast furnaces, where the Act permits their employment till July 1870. It seems incomprehensible how such a clause as No. 7. of the temporary modifications could have been allowed to creep in, for I can conceive few occupations more calculated to degrade and unsex a woman than employment by night among men in blast furnaces.

The printing establishments in this subdivision are very small.

Very few young persons are employed in them; and there is no peculiarity about them calling for any special notice. Many, however, mention, that several of the printers now employed in Wales were brought up in the large printing offices in London, and they have volunteered the statement to me that in those establishments the Factory Acts Extension Act is much needed.

In addition to the new works there are in my subdivision about 140 small woollen factories. I found these in a bad state. They were, as a rule, very dirty, and what little there was to do in carrying out the Act had been systematically neglected. If the statements of the occupiers can be credited, these mills have only been inspected at long intervals; and to that reason, and also to the fact that the occupiers are for the most part ignorant of the English language, I attribute their backward state. They cannot, however, in the future, plead ignorance of the law, as I have shown them that I am able and willing to explain it to them in Welch. I have found that language a very great assistance, and have every confidence that in a short time I shall get them all into good order. They are very widely scattered over my district. They lie in very out-of-the-way places, and can only be reached by travelling very bad roads. For these reasons the inspection of them involves much time and expense. The present year was far advanced when I commenced my duties; but for the future I shall endeavour to visit my small mills during the long days of summer, because I can then get over more ground in a day, and also because the cross-country roads are in many places unsafe to travel upon after dark.

I believe I have now touched upon all the principal points in connection with my duties. In conclusion, I may state that a large portion of my time has, up to the present, been occupied in correspondence, sending forms and Acts, and in giving written instructions to the owners and occupiers of new works. The bulk of this work is now over, and next year I may reasonably hope to have more time to devote to actual inspection. I have also laboured under the difficulty of being strange to the district, and have lost much time in looking for the different factories. For the future, I shall be able to work my district in a shorter time, and to the best advantage, and to the satisfaction, I trust, of yourself and Mr. Ewings.

With regard to the "Workshop Regulation Act, 1867," I regret to say that very little has as yet been done; certainly nothing at Cardiff, or Swansea, or Aberdare. I have written to Haverfordwest and Pembroke, for information on the subject, but have as yet received no replies, and am unwilling to delay my report until they arrive. Merthyr Tydfil is, I believe, the only place in my subdivision where any action has been taken in the matter. I have received a full report from Mr. Dyke on the subject, which I beg to annex, for your information.

I have not myself visited any workshops. My time has been too fully occupied with the Factory Acts Extension Act; and indeed, if my memory serves me, I think you gave me personal

directions not to interfere with them, but to leave the carrying out of the Workshop Regulation Act to the local authorities. My own opinion (if I may be allowed to express it here) is, that if the Act is left to the local authorities it will very soon become a dead letter, like the Vaccination Act. There are numbers of persons in this country who have never been vaccinated, and yet I never hear of a prosecution, though I believe it is the duty of the guardians to take proceedings, &c.

I have, &c.

THOMAS PYERS MOSTYN.

From T. J. DYKE, Officer of Health, Merthyr Tydvil, to THOMAS PYERS MOSTYN, Esq., Her Majesty's Inspector of Factories, Mumbles, Swansea.

SIR, 17th November 1868.

IN compliance with your request, I beg officially to report to you, that the Merthyr Tydvil Local Board of Health adopted the "Workshop Regulation Act, 1867," in May 1868, and directed me, as their medical officer of health, to see that the various provisions of the Act were made known at the workshops in the town.

By personal inquiry, and through the inspector of nuisances under my orders, I have ascertained the numbers of such workshops, the number of persons employed above and below 18 years of age, and the sanitary arrangements.

I herewith send an abstract of the number of shops in different handicrafts, and of the numbers of persons employed therein.

I have to report that the sanitary arrangements generally are good, that the employers have been duly informed of the provisions of the Act, and that no occasion has arisen to report to the local board any infringement of the law.

T. J. DYKE,
Medical Officer of Health, Merthyr Tydvil, and Certifying Surgeon of Factories.

Workshop Regulation Act, 1867.

Number of Handicrafts, and of Hands therein employed, in the District of the Local Board of Health, Merthyr Tydvil.

Handicrafts.	No. of Workshops.	Hands above 18.	Hands under 18.	Total.
Brick maker	1	3	3	6
Cabinet maker	9	30	3	33
Carpenter and builder	9	33	5	38
Clock and watch maker	4	6	1	7
Coachmaker	4	15	3	18
Clog maker	2	3	0	3
Currier and tanner	2	3	0	3
Confectioner	6	10	3	13
Cooper	1	2	0	2
Dressmaker and milliner	19	45	36	81
Dyer	1	2	0	2
Fellmonger	1	10	0	10
Nail and tip maker	3	11	1	12
Plumber and painter	6	29	9	38
Shoemaker	25	68	9	77
Marble mason	4	7	1	8
Saddler	4	8	2	10
Smith	6	12	3	15
Steam sawmill	1	3	0	3
Tailor	21	70	7	77
Tinman	2	2	2	4
Tallow chandler	3	9	1	10
Weaver	8	20	14	34
Total	142	401	103	504

16th November 1868.

T. J. Dyke,
Medical Officer of Health.

The summing up of these reports by the Sub-Inspectors, is, with few exceptions, in unison with my own view of the operation of both the "Factory Act Extension Act, 1867," and the "Hours of Labour Regulation Act." I have touched on most of the topics on which the Sub-Inspectors have enlarged.

That the night turn system of children's work in iron works, and the late hours of children's work authorized by the "Hours of Labour Education Act," as shown by Capt. May and Mr. Mostyn, must tend to diminish the educational value of the half-time system, is, I fear, unquestionable. And in like manner, every attempt to prolong the hours of work of the adolescent workers into the evening, must have the same result on the value of night school teaching. And it appears to me the importance of education in every way, but particularly in providing us with skilled labour, is too apparent to bear the retroaction of some of the clauses of both these Acts, but particularly of the latter.

There is, however, one feature resulting from last year's legislation that I have not adverted to, but of which, one or two of these reports remind me, and it is, the already greater regularity of factory work throughout the country generally; clearly observable and an improvement recognized and highly valued. Assuredly the usefulness of the first hours of rational freedom from late employment has not been overrated. The power which the working classes now possess of making arrangements for out-door enjoyments in the summer, and for intellectual advancement of every kind during the winter months, is fully appreciated, and would be most reluctantly parted with It is indeed spoken of as a boon which they longed to possess years ago, and is most thankfully acknowledged.

The following is the list of prosecutions for the past half-year; and I hope it may be taken to show great forbearance on our part, as well as great obedience on theirs, that, out of 5,578 new occupiers, there have been only 26 prosecuted; the fines amounting to 86*l.* and costs to 39*l.* 17*s.* 1*d.* = 125*l.* 17*s.* 1*d.*

RETURN OF PROSECUTIONS FOR OFFENCES AGAINST THE FACTORY, &c. REGULATION ACTS, IN THE DISTRICT OF ROBERT BAKER, ESQ., INSPECTOR OF FACTORIES, DURING THE SIX MONTHS ENDED 31ST OCTOBER 1868.

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	Remarks.
1868			*Informations laid by Mr. Jones.*	£ s. d.	£ s. d.	
June 25	John Lowe, lock maker, Walsall.	S. Stephens, J. Shannon, J. Brewer, and J. W. Newman, Esqs., at the Guildhall, Walsall.	Neglecting to register the age of child, and when first employed, &c. &c.	1 0 0	1 1 0	
,,	,, ,,	,,	Neglecting to register the age of child, and when first employed, &c. &c.	- -	0 6 6	These summonses were allowed to be withdrawn on payment by defendant of costs only.
,,	,, ,,	,, ,,	Neglecting to register the age of child, and when first employed, &c. &c.	- -	0 6 6	
,,	,, ,,	,, ,,	Neglecting to register the age of child, and when first employed, &c. &c.	- -	0 6 6	
,,	,, ,,	,, ,,	Neglecting to register the age of child, and when first employed, &c. &c.	- -	0 6 6	
July 2	Thomas and Joseph Heaton, Lostock, near Bolton.	Edmund Ashworth and Robert Heywood, Esqs., Town Hall, Bolton.	Employing six young persons after 2 o'clock p.m. on Saturday.	4 0 0	3 4 0	Two cases withdrawn on payment of costs.
July 13	Josiah Tildesley - -	Rev. G. H. Fisher and R. D. Gough Esq., Willenhall.	Employing two young persons without having registered the names and dates of first employment.	2 0 0	2 19 0	One case withdrawn on payment of costs.
,,	,,	,, ,,	Employing wo young persons without surgical certificates.	- -	0 18 0	Withdrawn on payment of costs.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1868.			*Informations laid by Mr. Steen.*	£ s. d.	£ s. d.	
July 28	James Hall, mule spinner at Globe Spinning Co., Macclesfield.	John Upton Gaskill, Esq., John Dixon, Esq., Thos. Wardle, Esq., Saml. Pearson, jun., Esq., County Petty Sessions at Macclesfield.	Allowing a young person to work between the fixed and traversing part of a self-acting mule while in motion.	- -	0 19 6	Withdrawn on payment of costs.
Aug. 10	John Johnston, fustian cutter, Rush Green, near Lymm.	John Barton, Esq., George B. Dewhurst, Esq., County Petty Sessions at Lymm.	Employing a child more than 6 hours and 30 minutes same day.	- -	1 0 0	Withdrawn on payment of costs.
Oct. 14	T. and J. Baxendell, cotton spinners, Denton.	Abel B. Wimpenny, Esq., Nathaniel Buckley, Esq., Samuel D. Lees, Esq., County Petty Sessions at Ashton-under-Lyne.	Employing eight young persons and females after 6 p.m.	8 0 0	6 6 0	
"	" "	" "	Employing eight young persons and females after 6 p.m.	- -	3 4 0	Withdrawn on payment of costs.
			Information laid by Mr. Buller.			
Sept. 23	William Lewis, letter-press printer, 12, North-gate Street, Bath.	William Hunt, Esq. (mayor), Thomas Jolly and Anthony Hammond, Esqs., Guildhall, Bath.	Obstructing Sub-Inspector in discharge of his duty by preventing his admission to the factory.	3 0 0	0 9 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1868.			*Informations laid by Commander May, R.N.*	£ s. d.	£ s. d.	
June 8	Jane Beech, Burslem -	J. E. Davis, Esq., Stipendiary, Burslem.	Employing two children without school certificates	2 0 0	1 9 0	
June 23	Ambrose Wood, James Bradbury, Fredk. Baddeley, workmen, Burslem.	,, ,,	Neglecting to keep a factory clean - - - -	- -	0 6 0	Withdrawn on payment of costs.
,,	,, ,, ,,	,, ,,	Neglecting to keep a factory clean - - - -	- -	0 6 0	
,,	,, ,,	,, ,,	Neglecting to keep a factory clean - - -	- -	0 6 0	
July 22	Ellen Rush, Longton -	J. E. Davis, Esq., Stipendiary, Longton.	Neglecting to send her child to school - -	0 5 0	0 14 6	
July 29	George Hales, Longton -	,, ,,	Employing his child during the dinner hour -	0 5 0	0 12 0	
July 31	Keeling and Walker, Longton.	J. E. Davis, Esq., Stipendiary, Stoke.	Employing a child without a surgical certificate -	2 0 0	0 12 6	
,,	,, ,, ,,	,, ,,	Employing a child without a school certificate -	1 0 0	0 12 6	
,,	,, ,,	,,	Neglecting to keep a factory clean - - -	3 0 0	0 9 6	
,,	John Walker Longton -	,, ,,	Obstructing a Sub-Inspector - - -	3 0 0	0 18 0	
Sept. 1	William Tattler, Burslem	J. E. Davis, Esq., Stipendiary, Burslem.	Neglecting to send his child to school - -	0 5 0	0 4 0	
Sept. 2	J. E. Jones, Longton -	J. E. Davis, Esq., Stipendiary, Longton.	Failing to produce school certificates for seven children.	4 0 0	3 5 0	Three cases withdrawn, and two others withdrawn on payment of costs.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1868.			*Informations laid by Commander May, R.N.*—cont.	£ s. d.	£ s. d.	
Sept. 2	J. E. Jones, Longton -	J. E. Davis, Esq., Stipendiary, Longton.	Employing a child without a surgical certificate -	- -	- -	Withdrawn.
,,	,, ,,	,, ,,	Employing a child before noon and after 1 p.m. on the same day.	- -	- -	Withdrawn.
,,	,, ,,	,, ,,	Neglecting to limewash a factory - - -	3 0 0	0 8 6	
,,	,, ,,	,, ,,	Neglecting to keep a factory clean - - -	- -	0 0	Withdrawn on payment of costs.
Sept. 3	Thomas Billings, workman, Tunstall.	J. E. Davis, Esq., Stipendiary, Tunstall.	Employing a child before noon and after 1 p.m. on the same day.	1 0 0	0 13 0	The Secretary of State afterwards remitted 15*s.* of the fine.
Sept. 4	Thomas Wright, Stoke -	J. E. Davis, Esq., Stipendiary, Fenton.	Neglecting to send his child to school - -	0 5 0	- -	
,,	Joseph Burton, Stoke -	,, ,,	Neglecting to send his child to school - -	0 5 0	0 10 6	
Sept. 9	Catherine Grogan, Longton.	J. E. Davis, Esq., Stipendiary, Longton.	Allowing her child to be employed before noon and after 1 p.m. on the same day.	0 5 0	1 3 0	
,,	,, ,,	,, ,,	Neglecting to send her child to school - -	- -	- -	Withdrawn.
Oct. 23	George Brassington, Stoke	J. E. Davis, Esq., Stipendiary, Stoke.	Neglecting to send his child to school - -	0 5 0	1 3 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1868.			*Informations laid by Mr. Earnshaw.*	£ s. d.	£ s. d.	
Aug. 1	Daniel Brotherton, letter-press printer, Gloster.	E. G. Hallewell, Esq., Thos. Marling, Esq., Henry Evans, Esq., Thos. de Winton, Esq., Shire Hall, Gloster.	Employing a young person without having first registered his name and date of employment.	2 0 0	0 8 0	In none of these cases were the penalties exacted, the prosecutions being for the sake of example and for publicity of the Extension Act, 1867.
"	" "	" "	Employing a young person for more than seven working days without surgical certificate.	2 0 0	0 7 0	
"	Edmund Nest, letter-press printer, Gloster.	" "	Not producing or causing to be produced to the Sub-Inspector on his demand the register of young persons.	2 0 0	0 6 6	
"	" "	" "	Not hanging the meal hour notice as required by law.	2 0 0	0 5 0	
"	Messrs. Thos. Webb & Son, machinists, Gloster.	Same Magistrates, with addition of Sir W. V. Guise, Bart., Shire Hall, Gloster.	Employing a young person without having first registered his name and date of employment.	2 0 0	0 8 0	
"	" "	" "	Employing young person for more than seven working days without surgical certificate.	2 0 0	1 18 0	
"	" "	" "	Employing young person at 7.20 p.m. - -	1 0 0	0 7 0	
Aug. 21	John Elliott, letter-press printer, Stroud.	R. Winterbotham, Will. Capel, S. S. Dickenson, J. C. Little, Esqs., Stroud.	Not registering a young person and date of employment.	2 0 0	0 9 3	Convicted, but in neither case penalties exacted, the prosecution having been instituted for example and publicity.
"	" "	" "	Employing a young person without surgical certificate.	2 0 0	0 7 9	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence	Amount of Penalty. £ s. d.	Amount of Costs. £ s. d.	REMARKS.
1868.			*Informations laid by Mr. Earnshaw*—cont.			
Aug. 21	John Elliott, letter-press printer, Stroud.	R. Winterbotham, Will. Capel, S. S. Dickinson, J. C. Little, Esqs., Stroud.	Employing a young person under the age of 16 after half past 4 o'clock Saturday afternoon.	- -	- -	These two cases withdrawn, defendant having admitted the fact, and having expressed great regret.
"	" "	" "	Employing a young person after 6 o'clock in the evening of sundry days.			
Oct. 1	Great Western Cotton Co.	Brooke Smith and P. W. S. Miles, Esqs.	Employing or suffering to be employed a woman during meal time.	1 0 0	0 10 6	
			Informations laid by Mr. Beadon.			
June 25	Joseph Temkinson, printer, Coventry.	J. Gulson, Esq., A. Hillpears, Esq., Coventry.	Employing a young person after 4.30 p.m. on Saturday, 13th June.	1 0 0	0 19 6	Had not obtained Secretary of State's permission to work after 6 p.m. One charge withdrawn on payment of costs.
"	" "	" "	Employing same after 6 p.m. 17th June - -			
July 30	Shilton and West, Engineers, &c.	W. S. Drydale, Esq., jun., J. Newdegate F. Astley, Esq., Nuneaton.	Employing two male young persons after 6 p.m. -	1 0 0	1 2 6	One charge withdrawn on payment of costs, being first case under new Act in the locality.
Aug. 3	E. B. Prosser, printer, Maidenhead.	R. Nicholson, Esq., (mayor), J. D. Rawlins, Esq., Maidenhead.	Employing two male young persons without registering their names.	- -	2 6 0	Withdrawn on payment of all costs, on same grounds as the above.
"		" "	Employing same more than seven days without surgical certificates.			

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1868.			*Informations laid by Mr. Faussett.*	£ s. d	£ s. d.	
June 30	John Metcalf, engineer, 35, Naylor Street, Liverpool.	Messrs. J. Woodruff and F. A. Clint, Liverpool.	Employing a young person under 16 years of age without a surgical certificate.	2 0 0	0 6 6	
"	" "	" "	Similar offence with regard to another young person.	2 0 0	0 6 6	
"	David McCallum, engineer, 4, Denbigh Street, Liverpool.	" "	Employing a young person without registering his name and the date of his first employment.	2 0 0	0 6 6	
"	" "	" "	Similar offence in the case of another young person.	2 0 0	0 6 6	
"	" "	" "	Employing a young person under 16 years of age without a surgical certificate.	2 0 0	0 6 6	
"	" "	" "	A similar offence in the case of another young person.	2 0 0	0 6 6	
"	Peter Smith, ironfounder, 67, Regent Road, Liverpool.	" "	Employing a young person without registering his name and date of first employment.	2 0 0	0 6 6	
"	" "	" "	Similar offence in the case of another young person.	2 0 0	0 6 6	
"	" "	" "	Employing a young person under 16 years of age without a surgical certificate.	2 0 0	0 6 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1868.			*Informations laid by Mr. Blenkinsopp.*	£ s. d.	£ s. d.	
Aug. 4	James Rowley, japanner, Mount Pleasant, Bilston.	Isaac Spooner, Esq., Stipendiary.	Employing young persons without registering them.	1 0 0	3 12 6	The fine of 20*s.* was remitted by the magistrate on condition that all the costs were paid.
"	" "	" "	Employing young persons without certifying them.			
"	" "	" "	Employing a child without having a school certificate.			
"	" "	" "	Employing a child both morning and afternoon of same day.			
			Informations laid by Mr. Johnston.			
June 25	William Giles, Macdonald Street.	C. Cope and E. Gwyther, Esqs., Public Office, Moor Street, Birmingham.	Employing a female after 6 p.m. on 12th June -	2 0 0	0 15 6	
"	" "	" "	Employing a female and one male young person after 6 p.m. on 12th June.	- -	0 19 0	Withdrawn on payment of costs.
July 30	John C. Onions, Bradford Street.	T. Phillips, Henry Wiggin, and C. Cope, Esqs., Public Office, Moor Street, Birmingham.	Employing five male young persons after 4.30 p.m. on Saturday, 20th June.	- -	2 1 6	Dismissed.
Sept. 9	Joseph Glover, Burton's Mill, Floodgate Street.	Thos. Cox and Joseph Sturge, Esqs., Public Office, Moor Street, Birmingham.	Employing a female after 6 p.m on 28th August -	- -	0 11 6	Withdrawn on payment of costs by defendant, on account of his poverty.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1868.			*Informations laid by Mr. Johnston*—cont.	£ s. d.	£ s. d.	
Oct. 8	John Huggins, Floodgate Street.	T. C. S. Kynnersley and Chas. Ratcliffe, Esqs., Public Office, Moor Street, Birmingham.	Employing two male young persons after 6 p.m. on 22nd September.	2 0 0	1 10 6	
„	Chas. Clifford, Fazeley Street.	„ „	Employing eight male young persons after 6 p.m. on 11th September.	8 0 0	5 14 6	
„	Dingley and Reader -	„ „	Employing five females and one male young person after 6 p.m. on 24th September.	6 0 0	4 7 6	
			Informations laid by Mr. Cramp.			
Aug. 6	James Moore, letter-press printer, 40, Ann Street, Belfast.	James Alex. Henderson, Esq., and Edward Orme, Esq., R.M., Petty Sessions Court House, Belfast.	Employing two young persons after 6 p.m. on July 17th.	2 0 0	0 5 0	At the request of the magistrates, and on account of this being the first prosecution in Ireland under the Factory Acts Extension Act, 1867, I withdrew one case upon payment of costs.
„	„ „	„ „	Employing two young persons without having previously registered their names and date of first employment.	2 0 0	0 5 0	One case withdrawn upon payment of costs.
„	„ „	„ „	Employing two young persons without surgical certificates.	- -	0 4 6	Withdrawn upon payment of costs, at the request of the magistrates, who thought the former penalties sufficient.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1868.			*Informations laid by Mr Cramp*—cont.	£ s. d.	£ s. d.	
Sept. 8	James Taylor and Sons, flax spinners, Barn Mills, Carrickfergus.	T. M. Birnie, Esq., chairman, John Borthwick, Esq., and A. C. Montgomery, Esq., R.M., Petty Sessions Court House, Carrickfergus.	Employing eleven females in reeling room after two of the clock in the afternoon of Saturday the 22nd of August.	6 0 0	1 19 6	The defendants having pleaded guilty and urged several extenuating circumstances, at the suggestion of the magistrates I withdrew five of the informations upon payment of costs, and a fine of 1*l.* was inflicted in six cases.
			Informations laid by Mr Bowling.			
July 8	Charles H. Cartwright, Bank Quay, Glass Works, Warrington.	Messrs. Henry Bleckley and Benjamin Pierpoint, Warrington.	Employing a child in the process of annealing glass.	2 0 0	0 8 0	
,,	,, ,,	,, ,,	Employing another child in the same process -	2 0 0	0 8 0	
,,	,, ,,	,, ,,	Employing a young person without registering his name.	2 0 0	0 8 0	
,,	,, ,,	,, ,,	Employing the same young person, being under 16, without a surgical certificate.	2 0 0	0 8 0	
,,	,, ,,	,, ,,	Employing another young person without registering his name.	2 0 0	0 8 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1868.			*Informations laid by Mr. Bowling*—cont.	£ s. d.	£ s. d.	
Sept. 24	Messrs. Tessimond and Kissack, engineers, Blackstock Street, Liverpool.	Messrs J. A. Picton and W. Crossfield, Liverpool.	Employing a young person under 16 without a surgical certificate.	1 0 0	0 6 6	Two informations for employing young persons over 16 without registration were withdrawn, the magistrates being of opinion that there was a discrepancy between sec. 9, Vict. 7, and the Schedule B.
,,	,, ,,	,, ,,	A similar offence in the case of another young person.	1 0 0	0 6 6	
,,	Messrs. Jones and Harris, tobacco pipe makers, 37, Vauxhall Road, Liverpool.	,,	Employing a child morning and afternoon of the same day.	1 0 0	0 6 6	Three informations charging defendants with employing two children without school certificates, and for employing another child morning and afternoon, were withdrawn at the suggestion of the Bench.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1868.			*Informations laid by Mr. Bowling*—cont.	£ s. d.	£ s. d.	
Oct. 16	Joseph Winstanley, bolt maker, Orrell.	Messrs. Thomas Whaley, James Taylor, and The Rev. John Jones Dixon.	Employing a child without certificated school attendance.	1 0 0	0 12 11	Four informations, charging the defendant with employing two children morning and afternoon of the same day, one child without a surgical certificate, and another without a school certificate, failed; the magistrates being of opinion that there was a doubt in these cases, which they were willing to give the defendant the benefit of.
			Informations laid by Mr. Girardot.			
Oct. 7	J. Mitchell and Co. - -	G. E. Paget, T. Middleton Warner, Esqs., Loughborough.	Employing four young persons, without having obtained the surgical certificates, for more than the prescribed period.	2 0 0	1 18 0	Mitigated penalties were taken in two cases, two being withdrawn on payment of costs.
Oct, 9	William Hickman, printer and bookbinder.	— Norman, Esq., (mayor,) — Barry, — Atkins, Esqs., Northampton.	Obstructing the Sub-Inspector in his duties by trying to prevent his taking the names of young persons employed.	3 0 0	0 11 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1868.			*Informations laid by Mr. Girardot*—cont.	£ s. d.	£ s. d.	
Oct. 9	William Hickman, printer and bookbinder.	—Norman, Esq., (mayor,) — Barry, — Atkins, Esqs., Northampton.	Employing three young persons without obtaining the surgical certificates within the prescribed time.	- -	1 7 0	Withdrawn, at request of the Bench, on payment of costs, a penalty having been inflicted in the former case.
„	Chas. Lea, printer - -	„ „	Employing four young persons without registering their names or obtaining surgical certificates for them.	2 0 0	1 19 6	Three cases withdrawn on payment of costs at request of the Bench.
			Informations laid by Mr. Bignold.			
Oct. 21	John Mullany, of 47, Fleet Street, Dublin, letter-press printer.	Edward Spencer Dix, Metropolitan Police Court (South side), Dublin.	Illegally employing two male young persons after the hour of half past 4 o'clock p.m. on Saturday October 3rd, 1868.	1 0 0	0 5 0	This being the first conviction under the Act under the Act in Dublin, the magistrate said he should inflict the lowest penalty allowed by the Act.

THE HOURS OF LABOUR REGULATION ACT.

I do not know that I could bring under your notice the general operation of this Act better than, as it is expressed in the following letter of a manufacturer, extracted from the Birmingham "Daily Post" in July last.

"THE WORKSHOPS ACT.

"To the Editor of the 'Daily Post.'

"SIR,

"YOUR remarks in Saturday's 'Post' in reference to the Workshops Act are quite needed. If any regulation is needed, most assuredly it is wanted in the small manufactories of this town. I myself am engaged in a trade in which there is great competition; and yet because I have 50 people, I must send all my hands away just as the clock strikes six. My neighbour and opponent in business, not having 50 hands, is working his people just as he likes. Now, in my business, an hour occasionally after six o'clock at night would be of the greatest use in the case of shipping orders. I may, for want of a few hours' overtime, get an order countermanded; while my neighbour, by working his people overtime, may secure such orders.

"I ask that the law may be made equal to all. Besides, if this Act is intended for the good of the people, why should it not reach all? You will understand that I am honestly trying to carry out the Act in all its parts, as I really think it will be best for all in the long run. When our people are educated to see this great benefit, the time given them may be made useful in educating themselves.

"I believe already it has been of use in causing a more regular attendance at work in the earlier part of the week. I am sure the town council could not be better employed than enforcing the Act, that is, if they have time to do it, which I am afraid they have not. I believe the Factory Act is hardly carried out entire in the town. Have Inspectors visited every factory employing over 50 hands?

"Yours respectfully,
"A MANUFACTURER."

The parts of the Act to which this gentleman addresses himself are as follows:

1. That if any regulations are needed, it is in the smaller manufactories.
2. The competition between factories and workshops as the law now stands is unfair.
3. That if the law was equally and honestly carried out it would be best for all parties in the long run; and,
4. That he fears the local authorities have not time to carry it out.

U

On these separate topics I propose to say a few words.

Of the number of workshops, in the town of Birmingham for example, I am not even able to form a computation. The division of labour is so minute, and so much of it is carried on in the homes of the workers, that it would be impossible for me even to offer an opinion upon it. It is, however, this very minuteness that increases the evil of the dividing line drawn at 50 persons between them and factories, evoking a competition that is greatly magnified by the number of hours within which workers in workshops may be employed daily, though forbidden in factories, and thus creating dissatisfaction with laws that afford fewer privileges in those works wherein due discipline can be properly enforced than in others in which there are associations that, naturally in all their movements, are more irregular.

The question asked by the manufacturer employing 50 hands, of himself, of us, and of the public, is, why should I be placed under the restrictive hours of the Factory Act, the expense of surgical certificates, the keeping of books and the inspection of the Government, and my neighbour in the same trade, who employs 49 hands, can work four hours longer than me, when there is no one to look after him; and hundreds of other lesser manufacturers that can undersell me by their greater power of economical production are under no control whatever? To reply that, this evil would have been greater had the dividing line rested at 100 as the bill was originally drawn, is no answer to this enormous grievance, for such it is in every sense. To tell him that it was an experiment that required testing, is scarcely compensatory for even only a year's loss by the competition he is subjected to; nor does it lessen the heart-burnings resulting from his watching those that are "let alone," work at their own convenience, evade the law on all occasions, and boast of it into the bargain; so that, without an alteration in this respect at least, there must ensue a great disobedience to both statutes, which would be extremely undesirable. Moreover, it is not alone that these two laws, operating thus unequally, form a trade grievance, rightly so called, but an enormous abuse in the wrongful employment of little children, and in the avoidance of that instruction which was intended by the Legislature to be general, and to afford the educational principles of the Factory Act a fair trial. My belief, as "the manufacturer" expresses his own, is commonly the accepted one, namely that, if these laws somewhat amended were fairly carried out it would be the best in the long run for all parties. Indeed there can be no doubt of it. For out of the reach of Factory Acts there have been many efforts made lately for early closing, volun-

tarily, in which the masters have silently acquiesced, and would have only been too glad to see carried forward, provided it was universally observed. And there is too an impression creeping over the public mind, and strengthening that, if under the Factories Act, a general observance of shorter hours of work prevails, the same movement will be extended over all trades, modified only by trifling interests which workers as well as masters will only be too happy to concede.

It has been, for instance, the strongest plea for all kinds of relaxations under the Factories Acts Extension Act, 1867, during the past year that, the working classes are beginning to reside one, two, or three miles from their places of work, and in several instances that they come and go by railway. On that account, if for no other, the hours of work ought not to be extended to 7, 8, or 9 o'clock at night, *i.e.* to the time of starting the last train outward. Nothing could be much worse in a social point of view than, for women especially, to have to return home from work at 8, 9, or 10 o'clock at night to their families, in all weathers, and out of every degree of temperature, even if they may ride two or three miles, to complete their day's work in neglected domestic duties. It shows that the present tendency of both workers and masters, wearied with the din and reek of close alleys, the turmoil and excitement of towns, the noise of hammers and the whirl of straps and wheels, is to seek repose in the quiet of more distant residences, as far as possible from the associations of the day and the excitement which they occasion: and this feeling is to be encouraged. But it can only be so by an assurance that, the operation of the factory laws, shall be uniform; and that no occasion can possibly arise for stealthy overwork, or for overworking by one manufacturer over another, and especially by the smaller over the larger employer. This of itself would be a great gain, and far more satisfactory than the present state of things.

I shall be able, I think, to show further on that, as the manufacturer says, the local authorities have not time, and some of them perhaps have not the inclination, to trouble themselves with the duty of enforcing the "Hours of Labour Act," and therefore, as my Sub-Inspectors assert, it is comparatively "a dead letter."(*a*) And this result was I think to be anticipated from the reasons given for the appointment of Government Inspectors in 1833, to be found in the following words in the 3 & 4. W. 4. c. 103. s. 17:—"And whereas by an "Act intituled 'An Act for the preservation of the health

(*a*) Since this was written several country places are attempting to carry the Act out.

" 'and morals of apprentices, and others employed in cotton " 'and other mills, and cotton and other factories,' passed in " the 42nd year of the reign of his late Majesty George " the 3rd, it was amongst other things provided that the " justices of the peace for every county or place in which such " mill was situated should appoint yearly two persons not " interested in or in any way connected with such mills or " factories, which visitors were empowered and required " to enter such factories and report in writing, &c., &c., &c.; " and whereas it appears that the appointments of inspectors " were not duly carried into execution, and that the laws " for the regulation of the labour of children in factories " have been evaded, partly in consequence of the want of the " appointment of proper visitors or officers, whose special duty " it was to enforce their execution." In fact it could scarcely have been contemplated in 1868 that, local authorities, who are in many places the manufacturers themselves, should appoint their own officers to superintend their places of business; or where, if even this was not the case then, without extraordinary zeal for the welfare of communities that, officers should ever be appointed by local authorities where it could possibly be helped, whose salaries would have to be paid out of the rates, unless compulsorily.

In the recital of the " Hours of Labour Act," it is stated that, " it is expedient to extend protection, so far as " respects the regulation of the hours of labour, to children, " young persons, and women, working in smaller establish- " ments:" the words "extend" and "smaller establishments" referring to the " Factory Acts Extension Act, 1867:" I propose therefore now, to consider the clauses of the " Hours of Labour Regulation Act," and to give a few illustrations of their application, or non-application, as the case may be, so far as my experience goes. Supposing, this Act to have been everywhere fully enforced by the local authorities, I think even then, it would scarcely have extended protection to the children, young persons, and women under its provisions, but on the contrary, it might have rendered permanent, by the force of enactment, the employment of little children till eight o'clock at night; and of young persons and women for any variable 12 hours, including meal times, between 5 a.m. and 9 p.m., hours of labour longer than those defined by the 3 & 4 W. 4. c. 103. s. 1, which limited the commencing and closing hours of work in factories to between 5.30 a.m. and 8.30 p.m., and which late hours were certainly not general in other than textile works in 1866, though they might have been occasional.

Is not the employment of a child of eight years of age till

eight o'clock at night and for 6½ hours previously *contra naturam*, and against the laws of life? and is not that of young persons and women till nine o'clock at night, opposed to the social and moral laws of any community professing to be advanced in civilization?

By the general definitions of the Hours of Labour Act, s. 4, "employment" means "occupied in any handicraft, whether for wages or not, or under a master, or under a parent."

"Handicraft" means any manual labour exercised by way "of trade or for gain, in manufacturing or repairing any "article."

"Workshop" means "any place whether in the open air or "under cover, and over and to which the employer has "access and control."

These three definitions taken together, are practically illustrated in the following trades which ought to come under the "Hours of Labour Act," but do not, for want of local supervision.

The Nailers of Sedgely Parish in South Staffordshire, by Dr. Ballenden.

The dwellings of the nailers are confined to the upper portions of the parish, *i.e.* to the village of Sedgely, Upper and Lower Gornel and Gornelwood, and its immediate neighbourhood. Their numbers cannot be accurately ascertained for various reasons. From a visit to the nail warehouses, I find however that altogether in Sedgely parish they may amount to 1,230. By far the greatest number of these are women and children. Of adult males there are extremely few, most of them elderly, and some of them of very feeble physical development.

A very few men of average strength continue in the trade, and these are spike makers and horse-nail makers, and these get the highest wages in the trade. Though the adult nail makers are of less than the average strength, there does not appear to be anything in their employment to be at all injurious to health. The apparent degeneracy in the physique of the nail makers arises from the fact that almost all the robust young men leave their nail shops for more remunerative employment, some as miners, some as iron workers. When there is a strike among the iron or coal workers, they come back to the nail shops. Then also their wives go to work as nailers, which frequently they do not do in good times, the family then depending entirely for support on the wages of the husband. Many men also, who have received some injury, unfitting them for their ordinary hardwork, manage to get a living in the nail shop. Among what are

called "white-stone getters," there are many men who after a time get disease of the lungs from inhaling particles of grit, and these men soon become incapable of their usual work; and if they have learnt "to nail" in their youth they go to the nail shop.

The health of the nail makers as a class is very good; they are not subject to any specific disease; as a rule they live long, their occupation being one not too exhausting, their hours of labour being under their own control.

The hours of labour are irregular; it is generally Tuesday or Wednesday before they commence the week's work. From Saturday morning, when they usually go to reckon, till Tuesday or Wednesday they "play," *i.e.*, they have a long revel, then work, and starve through the rest of the week till the next reckoning day. It is by no means uncommon for them to work all Friday night, men, women, and children.

As to education, in the ordinary sense they have none. In visiting many workshops for the purpose of this information, I find almost none of the adult women or men able to read or write; about one in ten of the children appear to be able to read a little. All the grown-up nailers whom I examined were incapable of reading or writing, yet, strange to say, the masters tell me they are good calculators, the slightest error in their reckoning being at once detected. As to their religious education, from my own personal knowledge of them, and from what those best acquainted with them say, I fear it is very little. Indeed, more than one of our clergymen have told me they could make no impression on them, "that there does not seem to be anything to work upon." Few attend any place of worship; almost none go to church. Some few attend the Ranters. Sunday is spent in sleepy lounging about the fields, lying on their benches at home when they have not slept off the Saturday night's debauch, or standing about the blacksmith's door, or on the Bullring, anxiously waiting for church leaving, when they rush to the house of the "Red Lion." I would follow our poor nailers into the "Lion," but a dozen swarthy men would be up in a moment, each insisting with kindly pertinacity, that the doctor should taste out of his cup, well knowing that many a foaming cup would be replenished at his expense. This is the swearing room; a hundred men here have ample space in which to enjoy themselves. You cannot see from one end of the room to the other for tobacco smoke. The company are colliers and nailers chiefly. They don't swear, however, till they get drunk, or quarrel.

As to morals.—Thirty years' experience amongst the nailers tells one they are the most immoral people in England. I

could write on this subject what I hope no man would believe saving from his own observation. I have known facts which are not fit to be named. Here men and women cohabit and propagate in unions connected by no marriage service, and, strange to say, the Poor Law seems partly to blame for this, for the unmarried receive 1*s.* 6*d.* a week for each child, and 2*s.* for herself, which is no inconsiderable boon to the unmarried mother and father. This is in many cases an insuperable bar to matrimony, and a premium for adultery. One peculiarity struck me very forcibly when 30 years ago I came to this parish, viz., the extreme recklessness of infant life. Pregnancy is looked upon as a curse; the death of a child, if in a burial society, a blessing, a source of open, out-spoken congratulation. Excepting the sins of lust and drunkenness, the nailers are not vicious. There are no highwaymen amongst them, no burglars; they will poach and steal from gardens for food in bad times, but the use of the knife is almost unknown. I forgot to say there is among the nailers a great deal of negative murder, *i.e.*, a child is not let live; newly-born children, if slightly premature, require so much of "the little cares" which a mother only can give, that when these are withdrawn they fade away.

The little nailer, reared in his earthen or quarry floor, promoted to the forges, prematurely elevated to the nail block, lives, when trade is good, what may be called a jolly sort of life, for he is never sad, though he grumbles much. Give him a little animal food, and a good deal of beer, and he is as happy as he can conceive it possible for him to be. No mechanics' institute reaches him; no lectures, however amusing; no concerts, fiddle they ever so sweetly, ever have him to spend his hard-earned pence on them. He will go if you promise him beer; he will go to church or chapel, give him old clothes and a cup of beer; he will serve you like a dog, fight you, or for you, if you will but give him beer; wounds of his tenderest affections may be plastered up with beer; and all this applies to one just as much as the other. Indeed the women have more manly qualities than their husbands; and in their free fights, the wife is often the victim.

Their houses are the worst, in whatever neighbourhood they settle. The broken panes where pieces of paper fill the place of glass, pilfered nail bags keeping out the cold, the quarry or mud floor on which are three or four naked children sprawling unwashed, the ling fire in this land of coal, a round deal table with three rickety legs, a deal board smoothed on the upper side, and with four legs, acting as a chaise lounge, a three-legged pot and a tin kettle, furnish many a living room.

Enter their sleeping rooms, as I did this morning, fresh from the summer air, and you must hold your breath and rush to the window and throw it open. There lie husband and wife and two sick children. A young man of 25 in the same bed with a daughter of 19, brother and sister. In a corner a truss of straw, covered by a bag or two, is the bed of two more little ones; no blankets, no sheets, no washing apparatus—in fact a certain article, more celebrated for its use than ornament, is the only washhand-basin they have ever known.

As an illustration of the value of their household furniture, I will mention a fact which recently occurred in our parish. A brother surgeon in an evil moment, driven mad by the unwonted chink of a few superfluous sovereigns in his pocket, purchased some small houses in the Bullring. Time ran on, and no weekly shillings coming in from his tenants, he issued a "distress" on the poor wretches. One tenant paid a shilling and was allowed to remain: one was allowed to remain because I certified they were too ill to be removed, the third was sold up, the furniture upstairs and down realizing 3*s.*, and all dear at the money.

Friends who appear to know, tell me they live in this way so as to be defiant of county courts or even landlords.

They dress the girls sometimes very smart, but no man ever saw a nailer with a new suit.

The best men can earn from 16*s.* to 21*s.* a week, women as much as 9*s.*, children from 2*s.* upwards.

Such is a graphic description of a nailer's life by my certifying surgeon of the parish of Sedgley, Dr. Ballenden, who ought to be a competent authority, having, as he says, been practising there for 30 years.

On the 30th of July last I received the following letter from a correspondent:—

"I beg to inform you of a shop of nail makers composed of all girls under 16 years of age, kept at the fire till a very late hour at night, sometimes till 12 o'clock. I wish to draw your attention to this matter. Other shops are nearly as bad in this district."

On its receipt I at once directed Mr. Sub-Inspector Fitton to visit the neighbourhood in the night of Friday the 31st of July, and the following are extracts from his report:—

"On Friday, 31st, by your instructions, I visited a number of small nail makers' shops near Worcester and Dudley, between the hours of 9 and half-past 10 at night. I do not think there is any large shop with more than 8 or 10 persons employed in at all; but there are undoubtedly a number of small workshops, each employing from 4 to 8 or 9 persons, the latter number being

above the average, where the usual hours of work, or at least one or two days a week, are as late as 10 or 11, from the day's work having commenced and been carried on with little intermission from as early as 6 a.m. I obtained the help of a guide, who told me that in the winter time, in the deep snow, he had known the nail girls, and the chain makers also, sometimes to have to walk home one or two miles as late as two or three o'clock in the morning, on weighing-out nights. I visited a workshop in which were two women, one 60 and the other 40, at work at 10 p.m., the elder woman finishing her husband's work, who was sick in bed. She said that in these times they were glad to get anything at all to do; they had only got the order on that day from a neighbour out of charity, and they were obliged to send the order in next morning. A little further on I found a group of a dozen or more small workshops all in full work at 10 to 11 p.m., in all of which two or more young girls from 12 to 20 years of age, and now and then an older woman, with here and there one or more men, making cart or dog chains. The girls were sometimes assisting the men by heating and bending the red-hot iron rods, but most frequently each young woman was at work at a forge of her own. All the shops that I visited were at work at past 10, and expected to leave off at 11 or soon after. I was told it is not unfrequent, owing to the work being sent in late, for them to work till 2 a.m. on Saturdays. The girls did not appear to be tyrannically over-worked, but seemed to be working, as they said, just to get a living, and glad to have got the work to do, though they wished they had more time given to do it in.

"One reason given for this late work, quite an exceptional one, was that it was too hot to do much in the heat of the day. Other causes at the present time are, first, the very low price of iron and the uncertain state of the metal and rod markets, so that many of the chief nail and chain makers put off the purchase of iron as late as possible in one week in order to get the iron cheaply. But the chief and constant source of this late night working for many years past, is that the firms who chiefly employ these workshop makers of nails and chains do not give out their orders till the 3rd and 4th day in the week, waiting as long as possible to know how much they require, that all hands are forced to work almost without stopping during the latter part of a week to get the work finished by 'weighing-in time,' which also regulates the pay for the week on Saturday.

"The chief reason then, setting aside the exceptional ones of the great heat in the summer and the depression of the iron trade, for this night work, seems to be a want of system or of forethought on the part of the large trading firms, by the small workshops are employed.

"It may be true that, owing to competition at home and on the continent, the state of trade in England will not admit of a rate of wages high enough for the workshop people to get a living by even 12 hours' work at nail and chain making; but that can be no possible reason for not issuing the orders for the week until

the middle of the week, and then insisting on their being completed by Saturday.

"As an indirect result of the late hours at which the chain shops, with their accompaniments of noise and hammering, are kept going, I noticed that among the group of 40 or 50 children of all ages between 7 and 16, who followed me about, there were four girls not above 10 years old, each of whom carried a baby wide awake, and when I pointed this out to one of the older women, she said, 'the children can't sleep while us is at the 'hearth, so they'd as lief be walking about as lying awake in 'doors.' From all I have heard, the late hours of work in almost all the small chain and nail shops is rather the rule than the exception at this season of the year."

I add now a sketch of the life of the chain makers, which is spent mainly in similar workshops. It is also drawn by one who knows them well, but who is not a certifying surgeon.

The Chain Makers.

"The total number in the 'black country' of chain makers is about 3,000; of these 1,000 are women and children. For trade purposes the whole number is divided into three descriptions of workers, as, 1st, shipping chains; 2nd, country work makers; and, 3rd, American trace and ox chain makers. The first class are not much employed within my division; the second and third are. In Cradley Heath, and a few miles round, many work in shops attached to their own houses, and the tools with which they work are their own, or they are to be found in shops belonging to other workmen. These in the trade are designated out-workmen, to distinguish them from those who work in factories belonging to masters, who in that case find them tools also, and these are called in-workmen or 'factory men.' Nearly all work in the last-mentioned manner except around here. Each worker, whether making small or large work, must have a hearth and set of tools, including bellows, to himself; unlike wrought nail makers, who work four or five at a fire, with one pair of bellows.

"Females are employed only in the shops attached to the houses of the workmen, and are unknown in the trade except with us. But here it is no uncommon sight to witness a man, his wife, and three, four, or five daughters working in the same shop, and it may be, mingled with these, a son and two or three men who work as journeymen. Many also of the wives of colliers, puddlers, and other men who work at trades wherein women are not employed.

"Children of both sexes have been put to work in these

shops either to blow the bellows for the others, or to make American trace links at a shamefully early age, and in some instances worked early and late, and treated cruelly. As to their moral and social condition I am not aware that there is any notable difference between those in this trade and those in other trades around, but there are very many miserable homes amongst us, as may be expected when the women and daughters have to spend three-fourths of their working hours at the chain block. They not only have no time, but in many cases have no tact or taste for housework, or if they had, would be too tired. Mingling too with coarse men, blunts the delicacy which is justly considered the charm of females. It also deteriorates all the children under them, though trained by mothers whose manners were better. Yet there are notable instances of industry, frugality, and even high-toned piety to be met with here and there. Many own the premises they occupy, besides ten or a dozen sets of tools, and possibly from two to ten tons of iron; and they also manage to give their children a fair amount of schooling, and this is the more surprising when the fluctuations in their wages and amount of employment is considered.

"As to wages, there is no trade in which more irregularity prevails. Sometimes for a few months there will be such a press as to exceed the supply, and all sorts of workpeople rush in; then again for two or three years there will not be more than half enough work for the ordinary workpeople. For a few months in 1847 and again in 1854 wages were high, men at 24*s.* and women and children at about half that; now and very often they will not average more than a third of those sums. But you can imagine how difficult a thing it is to arrive at the precise amount when you consider that whilst some work at chains whose links weigh 30 or 40 lbs., and if working at the same kind of work some will make more than double the amount of work that others do, and then at one time the remuneration will be threefold what it is at others.

"The competition in the trade is about as follows: there are about 50 persons in the trade who buy the work from the masters, and fierce competition almost constantly prevails, especially amongst those who cater for the foreign markets. In a few of these houses a buyer-in is employed, and as may be believed the man that is considered cleverest at making a bargain is put into that post, and perhaps there will be a dozen of those who buy from us calling at each of these houses two or three times a week, and there is such scheming to get the orders, and of course to get a

profit on them, that it is not very comfortable for those masters if they have a conscience. These have to cut and contrive to get the workmen down as low as possible. Up to 1844 groceries and nearly all we consumed was given us instead of money, but so sickened were some of the trucksters themselves, that they encouraged the men to combine, and after a six months' struggle it was put down and has not been revived. But other practices, almost if not quite as objectionable, are now prevalent, namely, many of the employers now vend an article which we use to heat our links, called gleeds, and these are forced on us at 20 or 30 per cent. higher than market price; and another still worse practice is selling ale, and giving most work to those that drink most.

"I feel my sketch is very imperfect, for I have said some things I did not intend to and omitted some I purposed naming, but will conclude with repeating what I have stated, that if you indicate to me any point on which you wish further information I will try to give it.—N. FORREST, chain maker, Cradley Heath, near Briar Hill."

I think, Sir, you will consider Mr. Forrest's letter to be almost as graphic as Dr. Ballenden's, equally pointing to the necessity of the schoolmaster amongst both classes of workers, and of a local Inspector with respect to payments in beer.

In February last, I was invited to a meeting of nail makers at Bromsgrove, but could not, owing to an attack of bronchitis; but, after that meeting the vicar was good enough to communicate to me a difficulty as to the education clauses of the Labour Regulation Act, which does not apply to the generality of manufacturing towns, *i.e.* the great distances of many of the blocks of nail shops from schools. "The "parish," says he, "spreads over more than 8,000 acres, "and there are nailers in the most distant parts of it." The "one mile" is too short a limit as to school with us, as the eight years' limit is too young for the workmen nailers, who earnestly desire the age of a child on first going to work to be ten years rather than eight.

And here also with respect to the local authority. By a letter dated the 7th February, I was informed that "the "Workshops Act was brought before the Local Board of "Bromsgrove on Wednesday last. The Board expressed "their determination not to interfere in the matter in any "way," and, says the writer, "this decision will make the "Act a nullity so far as this parish is concerned, unless "some other mode is adopted. It is to be regretted that we "cannot have it applied, as it is much needed here."

The Straw Plait Schools of Bedfordshire, Bucks, and Herts.

The next illustration I have to offer is that of the plaiting schools of Bedfordshire. On the operation of the law upon them, a doubt has been thrown, and a point raised, so as to take them out of the category of workshops, and therefore from under the law altogether; and thus one of the worst forms of infant associated labour has escaped supervision.

My attention was early called to infant labour in plaiting schools by a letter from a Mr. Browne, a sanitary inspector at Leighton Buzzard, who detailed to me the long hours which little children of from 3 years old to 16 were called upon to perform, and the want of breathing space in the rooms into which, often as many as 50 children were crowded.

The work of a straw plaiter is scarcely to be called work, and yet it is, though it is neither difficult nor unpleasant work in itself, but I could imagine it to become irksome by breathing such an atmosphere as these children do for so long together, (just like so many bees in a hive about to swarm,) and to be kept awake and active by being "tapped" every now and then with a yard stick, in order that, the task of from 7 to 20 yards of plait may not be wanting when the day's work is over.

I visited two or three of these schools in Leighton, for many had been given up owing to the "badness of trade;" but in those I saw, I had I believe before me, precise specimens of straw plait schools everywhere in the county, with the merest local modifications.

Mr. Browne says:—

"The plait trade from 1831 has increased in extent from a radius of six miles to 20 in 1868, and employs vast numbers of the populations of Bedfordshire, Bucks, and Herts in preparing the straw, in making the plait, in dyeing and bleaching it, and in making it into hats and bonnets finished and prepared for sale. The population of Luton has risen from about 3,000 to 20,000. Dunstable, the original seat of the manufacture, has not progressed so favourably, but has more than doubled its population, although it had to contend with the loss of the road traffic in consequence of the introduction of the railway system, a loss which partly crippled the resources of its inhabitants. The straw is the ordinary wheat straw, selected for its purity of colour, drawn from the sheaf, the ears of corn cut off and tied in bundles for sale. It is then submitted to the 'pickers,' cut at each joint into proper lengths, sorted into sizes, tied up into smaller bundles, bleached, and sold to the plaiters.

"The first business of the plaiters when they receive the straw is to sort them again into sizes for splitting, for which purpose

they are furnished with a small instrument made of stout brass wire, with the end cut away, and bent down to form a point, a little way of which are four, five, or six cutters as required for the size or fineness of the straw for the plait about to be made. After the straw is split to the requisite fineness, it is damped and placed between two wooden rollers, acting upon each other by means of a handle, which is called a drill, to soften and make it more pliable to work. The plaiting then begins. Some is made of split straw single, some of 8, 9, 10, 11, or more, according to the prevailing fashion of the day, or the capabilities of the person engaged upon it; some use white straw, some dyed or mixed. The plaiters vary in age from 3 years old to 70 or 80, and are of both sexes, females supplying the larger number.

"The system of learning is by sending the child when very young to a neighbour's house, where a number of others are at work, which is called a school; some straws are given to it, and it is taught to double and twist them into something like what the rest are doing. As soon as it acquires a knowledge of what it should do, which in most instances it does in a few days, it is then expected to do a few yards a day of some of the simpler sorts, perhaps two or three at first, till it is in better practice, when it is increased as it gets older to 20, 25, or 30 yards per day, according to the quality of the plait or the speed of the plaiter. I have known a boy do 50 yards of common plait as his task before giving over. These schools, are for the purpose of compelling them to do a larger quantity per day than would be done if they were at home, as the master or mistress of the school keeps a sharp look-out; and if any of them are found playing or inattentive, the stick is brought into requisition, a fact of which they are well aware. These 'schools' are the ordinary cottage rooms of the poor, very often without any means of ventilation, or other necessary precautions for the health of the children. I have seen 50 children huddled together in a room about 15 feet by 15 feet and 6 feet high; and so careful was the mistress that they should be kept warm with the smallest quantity of fire, that every particle of air was excluded as much as possible; so that when persons entered the room it would be impossible for them to stand the atmosphere, so heated by the breath of the inmates, and the smell of the brimstone on the straws thoroughly impregnating it as well. The effect on the health of the children is very manifest. Boys that are brought up to plaiting, as a good many are, never do anything else, and indeed are not fit for ordinary labour. Of course there are but few of the female portion of the population that understand anything about housekeeping, or cooking, or repairing clothes; and as a consequence, when they get married and have a family, their homes are often in poor order, and comfort is only attainable when large sums are earned by the children. As they grow older, it often happens that the mother splits the straws and keeps the daughters at plaiting from year end to year end, they not doing anything whatever besides, until they have to do it for themselves and their husbands. Sometimes plaiters earn 14*s.* or 15*s.* per week,

and sometimes not more than 5*s.* or 6*s.* I have known children of nine or ten years old to earn as much. This is a strong incentive to the parents to get them at work very young, in order to make them proficient early, and bring in some money as soon as possible. It seems to me that the Workshops Act may be carried out to advantage in shutting up these schools, especially if the national schools will allow of the half-time system. Not one in twenty of the population is able to write, and very few to read, only what they learn at the different Sunday schools.

"It is a very excellent thing as an auxiliary to a labouring man's wages, but in many instances the power of the parent over the child is sadly abused, and requires the interference of the Legislature to place the rising generation in a better position than they are at present."

It seemed to me not an undesirable part of the national school system of work, if straw plait could be introduced in conjunction with knitting and sewing; and I was glad to find there was a possibility of this being done, by the following letter:—

"——— Parsonage, July 1868.

"In connexion with my parochial school, I have a straw plaiting school, which I have brought into conformity with the provisions of the Workshops Act. The consequence is, that another plaiting school in the place, where the provisions of the Act are not observed, is thinning mine; and as this will be the result in every such case, the Act will do more harm than good, unless it is enforced by those who have the power to do so. I have distributed some copies of the Act, but unless inspection follows, it will be regarded as a *brutum fulmen*. Hoping you will excuse my submitting this case to you."

The difficulty of applying the law to these straw plait schools as at present, lies in the fact, that, though the rooms in which these children are employed may be called workshops, they are not places over or to which, the person interested in the work done, has "right of access or control." Such schools are therefore neither factories nor workshops. Mr. Sub-Inspector Beadon, who visited these schools, as amicus curiæ, thus expressed an opinion to the magistrates at Leighton, on a case brought before them of overwork therein, and which was consequently dismissed; and the higher legal opinion which has since been obtained confirms this view.

By the extract from the letter which I have quoted above, and from other letters which have been addressed to me, it does not seem at all objectionable to the managers of national schools that plaiting should, to a certain extent at least, take the place of knitting and sewing, and become, for the children of the poor in these counties, an instruction at once useful and profitable. The effect of the discovery that

straw plait schools were not within the reach of the law, was at first mischievous; for, so long as they were deemed to be open to inspection, they were all given up, and the children preparing to go to better schools; but when it was found the Act did not apply, the old system was resumed.

A letter from a magistrate in Buckinghamshire, dated October 27, 1868, places the present position of straw plait and lace schools before us, as follows:—

"I find that, under the operation of the Workshops Regulation Act, the children under eight years of age are withdrawn from the plaiting workshops, and sent to school in very fair numbers, *i.e.*, whenever any earnest endeavour has been made to put the Act in force. But the children between 8 and 12, though withdrawn from the workshops, are not generally sent to school for half-time. Very few certificates are asked for from our schoolmaster. Children of that age can plait at home as well as at the workshop, and do so under their parents. No attempt has as yet been made to interfere with children working at home, yet the worst cases of cruel overwork have taken place at the homes, rather than the workshops. A very bad case of this kind came before the magistrates some years ago. The great fault of the Workshops Act is that it assumes the occupier of the workshop hires the children and pays their wages, which is not the case."

The following is also an extract from a letter by a competent authority in another part of Buckinghamshire:—

"Our village is an agricultural one. Girls are employed in pillow lace making. They go to some of the cottages, where they pay 2*d.* weekly to be taught. Many are under the age of 8, the bulk of them under 13, and never go to any school but on Sundays."

Such is also the case with the mat makers and other small trades in these upper midland counties.

Watch Movement Makers.

Another illustration I subjoin, viz., of the watch movement makers at Prescot in Lancashire, and it is from the pen of one of themselves:—

"Prescot, Lancashire,
"December 16, 1867.

"Sir,

"Prescot, as you probably are aware, is a small town some 8 miles from Liverpool and 10 from Warrington, containing a population of between 5,000 and 6,000 persons; the staple trade of the town is watchmaking, but you must bear in mind that we do not commence a watch and complete it ready for the wearer's pocket, although the different branches of the trade carried on here not only represent the groundwork of the watch but the

major part of the various pieces of mechanism used in the construction of that useful article.

"The watch movement making (the groundwork of the watch) forms by far the most extensive branch carried on here, and represents from 26 to 30 different branches in the trade; indeed Prescot is the only town in England (except Coventry, and that only in an inconsiderable amount) where watch movements are made to any extent. True it is a few are made in St. Helen's, (a town 4 miles distance from Prescot), but the greater portion of the work is made by workmen resident in Prescot. The village of Farnworth (about 5 miles distant from Prescot) contributed some few years ago its share of watch movements, but very few are made there now, the trade having centred itself more particularly in Prescot.

"I may also state for your information that Prescot is also celebrated for its manufacture of chronometer movements, clock movements, watch and clock tools, and also files.

"The great bulk of our goods are sent to London, Coventry, Birmingham, and Liverpool; Coventry using by far the greatest quantity of any other town, London coming next.

"As I previously stated, watch movement making is the principal branch carried on here, and involves the employment of the most labour; the different branches in it are more divided now than was the case formerly, a course which has become necessary to a certain extent, as it offers greater facilities to the manufacturer in the construction of the movement, and is of equal if not more advantage to the workman.

"There are but few large factories in the town, the greater portion of the men working at home, many of them having for their workshops small and incommodious back rooms in the cottages where they reside, and when I tell you of numerous instances of men with some two or three apprentices working in these rooms with necessarily confined air, you must admit their unfitness for the purposes for which they are used. There are of course many dwellings with small watchmakers' shops attached, but most of them are of an incommodious and unhealthy character. The best dwellings and shops are to be found at New Brighton, which forms part of Prescot, although within the boundary of Eccleston.

"I believe you made an inspection of the larger factories some time ago, so that I will content myself by saying they are far superior for working in than the majority of places used by the men working at home.

"The number of watchmakers in Prescot and neighbourhood are about 600, and out of these there are from 120 to 150 apprentices. In St. Helen's there are from 70 to 90 watchmakers, about a dozen of them being apprentices.

"In the principal factories a boy commences work about the age of 14, and receives as wages 1*s.* 6*d.* or 2*s.* per week for the first year, with 1*s.* of an increase in each succeeding year, so that he receives in his last year the sum of 8*s.*, this latter sum being the customary amount paid throughout the trade. There are, however,

innumerable instances of boys beginning work as young as 9 and 10 years of age, but these are to be found mostly amongst the class of workmen already referred to, working at home, who put their sons down to the bench as soon as they can make them of the least use, and this accounts in a great measure for the absence of education in the young of our town. I must however inform you that the provision made for educating our young is of a very limited character; there is only the Infants' school and the Moss school where the young can go to; the former is attached to the parish church, where there are four young women as teachers, three of them being from 15 to 20 years of age, whilst the principal is about 24, and was never thoroughly trained for school purposes. These teachers have confided to their care of an average some 200 or 300 children. The Moss school is governed by a certain number of trustees and four schoolwardens, the latter being elected annually at a public meeting in vestry; and before parents can send their sons to this school they must get them nominated by a trustee or warden, a requirement attendant with many evils, as the working classes are always loth to wait upon these dignitaries, saying nothing of the inconvenience they are subject to in ascertaining which of the trustees or wardens have any vacancies, as each one is only allowed so many to the upper and lower school. The present officiating clergyman, the Rev. G. Wall (the Rev. L. W. Sampson, the vicar, being absent on leave from the Bishop through sickness), has very recently arranged for boys being taken into the lower school at 3*d.* per week, but the school (which is a miserable place) soon became filled, so that the advantages gained for the town generally are but slight. I may just state the present master holds a Government certificate.

"The present hours of work of the watchmakers are as follows:—

September to March, 7 a.m. to 8 p.m.,
March to September, 6 a.m. to 7 p.m.,

with half an hour's grace for breakfast, one hour for dinner, and half an hour for tea.

"The tool makers, file makers, &c., work the same hours. These hours of work can hardly be said to apply to the whole of the trade here; they are mostly the hours of labour in the factories; but many of the men working at home work as long as 14 and 15 hours per day, and particularly those who idle away (and there are plenty of them) the two or three first days of the week; in fact Monday is a day on which the men generally care but little about working.

"I apprehend from the minute sent me some short time ago that you are about having the watchmakers brought under the Factory Act; if this be so, I fully believe it will be the means of conducing greatly to the benefit of the workmen generally, and particularly the apprentices. You must, however, deal with the whole of the trade or men, for if the Act is extended only to the men working in factories, the men working at home will have a considerable advantage over them, inasmuch as the men working at home will be able to make a greater quantity of work over the

men working in the factories ; and as it is the custom for the men to work piece-work, it is desirable they should be brought to the same level or placed on the same footing.

" The present average weekly earnings of men working in factories is from 20*s*. to 25*s*., the earnings of the men working at home being regulated by the demand for work. Previous to the great American panic their earnings were large, but trade since then has been depressed to a certain extent, and the men have suffered many privations ; few of them on an average are earning over 24*s*. per week, whilst many do not reach this sum. The depression of trade has brought down prices considerably, but if the men had full work, and would only do it, they can earn, even at the present rate of prices, from 4*s*. to 5*s*. per day.

" With regard to the social and moral condition of the men I must admit it is not of a very high standard. In Prescot and New Brighton we have no less than 26 licensed public-houses and 41 beer-houses, supported by a population under 6,000 persons, a circumstance which proves the moral condition of the working classes to be somewhat low. True it is we have no mechanics' institution, or anything to elevate the minds of these men, and this coupled with the disadvantages under which education is to be had, gives a sufficient reason for so many of the watchmakers being unable to read or write.

" When a watchmaker goes on the 'spree' he frequently continues it for some few days, and it is not an unfrequent occurrence for them to lose a week at a time. Many of them are enabled to do this from the fact of having an apprentice or apprentices who are capable of finishing the work and sending it in to the master.

" As a rule the majority of the men do not attend a place of worship, a circumstance attributable to a want of education, and to a desire for a ramble in the country after being closely confined through the week.

" It is a peculiar circumstance that many of the finest workmen can neither read nor write. It is maintained by some that inasmuch as they have had little or no education, they are the better enabled to bring all their mental abilities to bear with more force upon the particular branch of trade they work at. I, however, don't believe in such a theory; on the contrary, I have found it from experience to be a most fallacious argument, from the very fact of those men who have been educated to be equally well skilled in their work, and certainly much better as a rule to employ. Want of education is a curse to master and workman. Mistakes frequently occur for want of it. I will give you an illustrative case.

" Suppose you happen to want some work making, and the man whom you wish to do that work is resident some half mile away ; you send your errand boy with the order, who delivers it to the workman, who happens to be unable to read it ; he asks the errand boy to read it, who unfortunately happens to be in the same state of ignorance, so the man has to seek out some one to read it, who generally contrives to make it out into the very reverse of what you want.

"I do not of course mean to convey to you the impression that such things occur daily, or with every workman, but I do say such cases are not by any means unfrequent. I fully believe that if the men were better educated, so in proportion would there be less drunkenness, and consequently less misery on the hearths and in the homes of the Prescot watchmaker, and the British workman generally.

"Of course there are to be found plenty of workmen in our trade, of intelligence and fair intellectual attainments, and in these you find less drunkenness than in the class before referred to.

"I fear I have not given you a very intelligible report, but if I can give you any further information I shall only be too happy to do so.

"Before concluding I must again call your attention to the desirability of dealing with the whole trade, rather than by piecemeal, feeling assured that it will prove beneficial to all alike, and not only so, but as I have already said, if this is not done, the men working in the factories will be placed in an unfair position as compared with the home workman, which to me seems a point of very great importance.

"I have, &c.,
"James Berry,
"(Trading under the name of
"R. Baker, Esq." J. Hunt & Co.)

Locksmiths and Hinge Makers.

Lastly, with respect to locksmiths and hinge makers, the following letter is worthy of consideration:—

"Ashton, near Newton-le-Willows,
"Sir, "December 17, 1867.

"I am in due receipt of your papers relative to the working of the Factory Act upon our premises, and venture to lay before you the effect it will have upon our trade, with the hope that something can be done in the way of modifying its working in our particular case. I will first describe our present system. We have two trades—hinges and locks; they are purely local, that is, the manufacture of them, so far as our county is concerned, is confined to this one township. There are several other masters close by, none of whom will come under the Act, from the fact that they only have a few hands (locksmiths) upon the premises. Until a few years ago (1863) we were in a similar position; since then, when I took the management of the business, I have brought a good many hinge makers from the small shops at their own homes upon the premises, having built a large commodious workshop for that especial purpose. In this change we have no gain at all, except in making the men steadier and more regular in their habits; for those who still work outside as just named, make all sorts of long time, too often drinking Monday and Tuesday, and almost working day and night at the week end. Our hours upon the premises are Monday 6 to 5, less 1½

for meals; next four days 6 to 7, less 2 hours; Saturday until $12\frac{1}{2}$, less half an hour. This time applies to the hinge makers working in the large shops aforesaid, whose fires are blown by engine and fan, the former keeping the exact time just given, each man, or, as we call him, "master man," having his own fire, and two or three under hands as the case may be (*which he pays*), and we give him so much for the work when finished, reserving to ourselves the discharge and engagement of new hands. The locksmiths, who have no machinery at all, are not quite so punctual in their hours, simply because their labour is not stopped by cessation of machinery; their number is, however, few, compared with those already named. I will now particularize the effects the Act will have upon us. Firstly, the 10 hands under 13 years of age will all leave us, for their parents will not sacrifice one-half their earnings, when by placing them with men *outside* they can earn a week's wage in place of the half week if left with us. Secondly, the 14 hands from 13 to 18 will also leave us, for this reason, their masters cannot afford to pay the same wage for the reduced time, and they can easily get work outside at *hours* more congenial to their tastes. Thirdly, if we are to keep at work at all, we shall have to employ adults entirely, and this we could not do, to compete with the other masters in the trade, who, getting the whole of their work from men off the premises, are not restricted as we shall be, and will be able to procure goods at less price than we can produce them, otherwise we shall be compelled to reduce our hands below the number required by the Act; this I should not like to have to do, for I hold similar views to those aimed at by the Act, 'the improvement of the working man,' hence so few lads and no women upon our premises. I had very great difficulty in persuading the men to leave their own smithies and come upon the premises to work the hours named, and I feel confident if any attempt is made to interfere with them, they will of their own accord soon leave us to resume work at their homes, free from all restraint, a thing a working man dearly loves, especially when he has been brought up to it.

"Such I feel sure will be the effect upon us if the Act is put in operation. It will just work the reverse way to what it is intended to do.

"If you will send some one down to make inquiries you will find what I have stated to be perfectly correct, and further, that the generality of the thinking portion of our small community consider that I have rendered good service to these men in weaning them from their idle irregular habits, by bringing them upon the premises to work fixed hours. I do hope, therefore, that you will take our case into your consideration, as being one of those requiring the modification of the Act.

"I remain, &c.,

"Wm. Valiant,

"Managing partner of the firm of

"Jno. Whitley & Co.

"Robert Baker, Esq.,

"Leamington."

I now proceed to set before you extracts from other communications which have been made to me on the same topic, viz., the need of this Act, the apathy of the local authorities, and other causes which tend to interrupt its efficient working.

"7 September 1868.

"Many thanks for your obliging letter. This parish has a population of 1,792, the large majority of which are agricultural. According to the schedule of the Workshops Act, the local authority is the ordinary parochial vestry, and by the 18th section it shall be the duty of the vestry to enforce the provisions of the Act, or (as in this parish pillow lace making is the handicraft affected by the Act) to prohibit lace making, wherever it interferes with its provisions. My first question is, who has the power to make the vestry act if they decline? The Act says it shall be the duty of the vestry; but no penalty is attached to the non-performance of the duty. Under s. 10 you apparently decline to act, and if the vestry decline to do so, the Act is a failure unless the police can be called in. And this reaches my said difficulty. As I read s. 9 a complaint may be made by some one appointed by the vestry, or by a superintendent of police, who then is to set the police in motion? The chief constable of this county, on being appealed to, would probably say, 'I have 'nothing to do with the Workshops Act. If I am to enforce it, 'you must go to the magistrates in quarter sessions, who are my 'masters, and ask for orders.' The magistrates in quarter sessions would say, 'We are not the local authority.' If then the vestry will not, and the magistrates cannot take the initiative, the Act is a dead letter so far as this parish is concerned. I suppose the lace made in a school where lace making is taught by a mistress who is paid by the parents of the scholars is a handicraft within the meaning of the Act.

"In the Workshops Act it says, 'young persons are not to be 'employed on Saturdays after half-past four,' but it does not state whether there is any meal time or no; would you be kind enough to say by return? The Act will be a great boon."

Report of the Birmingham and District Trades Council upon the Factories Act and the Workshops Bill unanimously adopted and ordered to be printed.

"A Report of the Birmingham and District Trades Council upon the 'Factories Act' and the 'Workshops Bill.'

"Unanimously adopted and ordered to be printed, April 11th, 1867.

"Gentlemen,

"Our attention having been called to the two bills now before Parliament, namely, the 'Factories Act,' and the 'Workshops Bill,' and the subject being of very great importance, we have thought it advisable to report to you upon them, so that all representatives may have a fair opportunity of expressing their

opinion. We have carefully examined them, so far as the information at hand would allow us, and we are of opinion—

"1st. That it is desirable that the 'Workshops Bill' should be merged into the 'Factory Act,' or that the 'Workshops Bill' should be withdrawn, and the provisions of the 'Factory Act' so extended as to apply to all places for which the former bill was intended.

" 'Our reason is, because by the two measures there will be created two classes of factories, the one large, the other small, and leaving the smaller ones free from restrictions of which they stand in greater need, seeing that, as a rule, the sanitary arrangement, the system of management, and the moral supervision are of a much lower order than those generally adopted at large manufactories, and the children in the smaller factories would lose the benefit of the education that might be conferred upon them, if employed at one of the larger class.'

"2nd. That any measure for the regulation of the labour in factories should apply to all equally, irrespective of the number employed therein, whether it be a detached building, or part or parts of a dwelling house so occupied.

"3rd. That all should be subject to the same system of inspection and penalties for non-compliance.

"4th. That all inspectors should be appointed by Government, so as to be free from the trammels of local influence or prejudice.

"Seeing that some slight opposition is being raised to the passing of these measures, we have great pleasure in recommending the above suggestions for your adoption; and we would urge upon all to guard against the mistaken view of those few who are opposed to the said bills becoming law, on the ground 'That they 'are inapplicable to the trades of this town.' The reasons given have no solid foundation. It only requires a will, and the difficulties of application are ended. Practical experience teaches us that fixed and regular hours of labour are beneficial, not only to the workman, but to the employer also. And not only in the case of time labour, but the same rule will equally apply where piece-work is the custom.

"We also believe that a diminution in the amount of child labour will prove one of the great blessings resulting from the measure, inasmuch as it will exercise a most beneficent influence upon the rising generation, without inflicting upon the adult population, or any class, any evil consequences. And, considering that in countless instances children of very tender years are worked so far beyond their strength, that a proper development of what their physical powers might have been with ordinary care is never reached, and that many are sent to early graves, we think that any measure intended for their protection should receive our best support. And here we think it necessary to come in direct opposition to the suggestion of another party—'That a child should be considered a young person at the age 'of 12 years, instead of 13.' We think it more desirable that the

age should be extended to 14, seeing that childhood cannot be said to have passed before that period.

"With regard to the employment of women, we think that the restrictions placed upon female labour might be carried further with increasing benefits, as much of the misery and drunkenness of which we are accused may be traced to the absence of women from their homes, and the consequent neglect of those duties to the father and children, which it is the woman's mission to fulfil. And we hope the day is not far distant when the wisdom of the legislators of this nation shall be sufficient to show them the desirability of placing further restrictions upon the labour of married women in factories, so that more of their time shall be devoted to the social comfort and happiness of the family circle. Such measures, with the compulsory education of the young, are amongst those we consider most necessary to develope the true manhood and increase the glory of our country, of which our labour forms the foundation stone.

"In conclusion, we think we may point with satisfaction to the results of past legislation in this direction, seeing, that in spite of the opposition, and the deterring predictions hurled against it, our commercial intercourse and prosperity is extending with a corresponding increase of national wealth.

"William Gilliver, President.
"14, Grant Street.
"Roger Bateson, Secretary,
"210, New John Street West."

Feeling this to be a letter containing valuable information, as coming from working men, but being desirous of knowing how far the trial of twelve months under the Act had changed the impressions of the Trades Council, I addressed a letter to Mr. Gilliver, whom I have not the pleasure to know, on the subject, and append his reply, which I have been able to do since this part of my report was commenced. It is as follows, and I commend it to your attention:—

"Dear Sir, "Birmingham, November 24, 1868.

"I beg to acknowledge the receipt of your note of yesterday, addressed to me as president of the Trades Council. Although I have ceased to preside over that body, having served a 'double term,' I still remain a member. I feel sure that I can with every confidence answer your inquiry. I have no reason to believe the members of the Trades Council have changed their views upon the Factory Act and Hours of Labour Regulation Act since the publication of their brief report upon them. I rather think time has confirmed them in the opinions expressed therein; nor do I think there would be the slightest objection to your making any use of it you might think desirable in furtherance of the cause it was intended to serve. You are doubtless well aware that the Workshops Act, so far as Birmingham is concerned, is a dead letter, and likely to remain so. I see no

possibility of its ever being brought into operation, so as to produce any beneficial results under the powers appointed therein to carry out its provisions. It was a great mistake, for which those are most to blame who encouraged and supported it when before the House of Commons. I believe those who introduced the measure did it with the best intention, but had they seen things as we workers are compelled to see them, they would have been guided by a purer light, and perhaps to a more wise and satisfactory conclusion. As it is, the two measures cannot be brought into harmony; and the one is detrimental to the progress of the other; the most unfortunate thing being that those localities which stand most in need of restrictions, inspection, and regulation, are escaping all, to the annoyance, disadvantage, and sometimes inconvenience of those who are willing to adapt themselves to any change likely to prove beneficial to the great body of their work-people.

"There are some few who say the Workshops Act has not been tried. In my opinion it would be an entire waste of time to attempt it in its present shape, and more especially under local authority. It would require a little host of officers whose duty it would be to look after (in some instances) those who had the appointment and control over them. Another thing that would be opposed to its successful working is the wide range the Act gives as to the hours that may be chosen wherein women and children may be employed.

"I know you are aware of all this; and it was because we looked at the subject in this light that we took the steps we did. I am not surprised that employers should offer opposition to these measures, because they do not like to be interfered with; and there is a little excuse for managers not desiring such, because at first sight they have the appearance of an increase of labour for them. But I think there is no shadow of excuse for those who professed to support the Workshops Act as the better measure. I cannot even now divest myself of the opinion I entertained at the time in respect to some of their actions. They appeared to me determined if they had the one measure to get the two, so that in the confusion caused by such a result, the good effects might escape.

"There is, however, now, one pleasing feature connected with the subject I should like to mention. I am told that some who offered considerable opposition to the Factory Act do not find it quite so troublesome and objectionable as they had anticipated; and I think one of the best things that our new House of Commons can do will be to bury the Workshops Regulation Act as a child still-born, without ceremony, and extend the Factory Act to all, with such modifications as your extensive knowledge would enable you to point out.

"I am, &c.,
"Wm. Gilliver."

I believe this letter is about as true and fair an exponent of public opinion with reference to the Workshops Act in its present form as could have been given. I hope, however, to

satisfy Mr Gilliver that with certain emendations it can still be made eminently useful; and that by means of both Acts, a new era of reasonable liberty and educational development will be effected, which will be amply compensatory for the minor troubles, individual and exceptional, they may have occasioned.

The following letters are from other parts of my division:—

"Warrington, September 1868.

"You are perhaps aware that the Workshops Act is now in operation in Warrington and Lymm, and this has been brought about by the fustian cutters; and that body is desirous that this law should be extended to Cadishead, a district where the law is required the most, inasmuch as there are large numbers of domestic cutters in that district, and the whole do anything but observe any law whatever. The united district of fustian cutters have done all they can up to the present to get the Cadishead cutters under the Workshops Act. We have had a deputation who have waited on the Board of Guardians for the Eccles union, the only authority over that district. They won't entertain it, except the application comes direct from the district itself; and as we cannot get these people to take it up themselves, I am desired to write to you for your advice as to the next step we should take to bring these outlaws within the provisions of the law, as we are certain if they are allowed to do as they are doing at present, will interfere with the welfare of the trade to a large extent during the forthcoming winter."

The following letters show the operation of the Workshops Act under the local authority at Lymm and Warrington, in answer to questions put by me to the inspector with the sanction of the authority:—

"Sir, "Lymm, 7th October 1868.

"I beg to inform you the Workshops Act has not been carried out under me with much success, as I have been at a loss to know what power I possess in workshops that are under the supervision of the Factory Inspector. I have not been in the habit of visiting the workshops, and cannot, therefore, inform you how many there are, or how many hands employed, &c. The only steps I have taken in the matter have been to regulate persons cutting fustian in their own houses; and in several instances where I found overcrowding I have summoned them under the Nuisance Act, 1866. I have also summoned one person for allowing two daughters to work in the night. I receive no remuneration for these duties with the exception of 10*l.* per annum, which I have always received as Inspector of Nuisances.

"Henry Dutton."

"Sir, "Warrington, October 7th, 1868.

"In reference to your inquiry as to how the Workshops Act is carried out here, I beg to say that in Warrington there are 112 workshops, and that there are employed in them under the Act 363 persons, namely, women and young persons, 348; children who attend school, 15. I have made no visits beyond what was necessary to get the numbers, arrange for the children going to school, and deliver to each occupier the enclosed notice (small and useful abstract of the Act, printed by the town council). I receive no special remuneration for this service. The only offences I have detected were at the workshops where children are employed, and that was when delivering the notice referred to, and no proceedings were taken. I think we shall have no children employed here in a few weeks, as the masters are turning them away, and employing young persons in their places. Of the 15 children employed here 10 are rope makers, four make soda water, and one is a nail maker. There are a few cases of fustian cutters who have persons in their houses, but these we shall deal with under the Sanitary Act.

"Wm. Hester,
"Inspector of Nuisances."

Mr. Sub-Inspector Girardot reports from Northampton, September 24, 1868—

"I find the local authorities here have still done nothing with the Workshops Act beyond sending out the handbill. This makes the restriction on the larger works very unfair, and it is not giving satisfaction."

Another correspondent writes—

"I should be happy to think that the fines might be in some way available for schooling for the children of the very destitute."

"——shire, September 29, 1868.

"On Saturday last I was present at a meeting of clergymen and schoolmasters, and your Workshops Act made easy was discussed. There are two parishes desirous of working the Act, but the authorities fear a break-down in prosecuting, for it is evident from what has been done the people will kick against it. Further, the schoolmasters and clergymen feel that it is not their province to become public prosecutors; and having looked in vain to the police for help, we feel our only method is to lay the case before you. I have done all in my power mildly to obtain submission, but no notice is taken of it. I have gone from house to house and read the Act, and in several instances have given information to the police of children under eight working all day at the lace pillow, but up to Sunday last that body had not paid one visit. Under these circumstances we feel the Act to be worse than useless, because all know of its existence, and feel (though it be the strong arm of the law) they can evade it with impunity."

With respect to Leicester, though Mr. Girardot reports that he has a very good account to give of the working of the

Workshops Act, that it has been put on a thorough system, that there are 550 places under inspection, and 700 children under 12 attending school, yet still all is not done by the Act which it seems desirable should be by the shopkeepers themselves. One of these gentlemen, writing to me in June last, says, "The Workshops Act will seriously interfere with "us on account of Saturday being market-day, and a very "large per-centage of the business is done after four o'clock. "Therefore to send our milliners away at two would compel "our customers to go to small places of business, where a "small number of hands are employed, that are not affected "by the Act." "I regret to see the Act does not affect "young persons employed in shops as well as workrooms; "for I am quite convinced that the work in the shop is "more laborious than in the workroom; and I trust ere "long we shall be compelled to close our shops as well as "workrooms."

One more case I would introduce, (as it relates to a divided authority in a township,) which it is desirable should be remedied.

The district of Denton, in Cheshire, comprises the whole of the township of Denton, which, with the adjoining township of Haughton, forms no inconsiderable town. Whether there is a Local Board of Health for the township of Haughton or not I do not know, but the Local Board of Denton have put the Workshops Act in force; no notice has been taken of the Workshops Act by the Haughton side of the district. Mr. Sub-Inspector Steen writes of Denton, "Abstracts of the "Act have been prepared by the lawyer to the Local Board, "and issued to all workshops, principally to the hatters, on "a small scale. A difficulty has arisen in the appointment of "an inspector, the Local Board wishing to appoint the ser- "geant of police; but the head constable, it is understood, "objects to his accepting it. In consequence of this an in- "spector has not yet been appointed. There is every reason "for believing, however, that the Act is fairly obeyed, and "is working to the satisfaction of the larger employers of "labour, who are already under the Factory Act."

I have had the workshops on the Haughton side of the township thoroughly inspected, and Mr. Steen reports the result as follows:—

1. I have not seen any necessity for a fan.
2. That very few children are employed under 12 years of age; that of such as are employed some are in attendance at school, but the forms of certificate were not obtained, and therefore were not produceable on demand.

Examples of Enforcement of the Hours of Labour Regulation Act enforced as far as possible.

You will have observed down to this part of my report, both by these extracts and the reports of my Sub-Inspectors, that the operation of the Hours of Labour Regulation Act is almost a dead letter, mainly through the apathy of the local authorities: (I speak of course only of my own district) whilst, if the Factory Act Extension Act 1867, is to be maintained, the supervision of workshops is as universally demanded. I will now proceed to show you, by two or three examples, how, even in its present form, the Act is fairly carried out, so far as it may be; and with some emendations could be made to answer all the purposes for which it was intended. The three examples I shall quote are at Merthyr Tydfil, Leicester, and Leek.

Mr. Surgeon Dyke's report, given at page 193, points to one method by which it has been successfully carried into effect, and this gentleman is no mean authority, as his annual reports on the sanitary state of Merthyr show. The Workshops Act, it appears, was adopted in May 1868, and the Inspector of Nuisances was instructed to carry it out under Surgeon Dyke's directions. He reports that the sanitary arrangements generally are good, and that no occasion has arisen to report to the Local Board any infringement of the law.

Mr. Dyke has done that also which is so extremely valuable, namely, he has collected the numbers of employés in a total of 142 workshops, at ages above 18 and under 18, and has distinguished the trades, which, with reference to vital statistics, is still more valuable; for with some watchfulness, but with very little trouble, the figures he has given, compared with the annual mortality in the trades, in proportion to that of the population, if carried out in all districts, would form a tabulation of the utmost possible value to Dr. Farr, of whose reports one cannot speak too highly. The proportion of workers to each workshop is about $3\frac{1}{2}$, and the number of persons under 18 about $\frac{1}{4}$th.

2ndly. The Act has been also carried out at Leicester. The subjoined report from Mr. Sergeant Wright exhibits considerable care in the efforts made to administer the law, and to obtain certificates of due attendance at school. I am not, however, in favour of domiciliary visits by the police to workshops; for I fear it may tend to depress these small employers in their own estimation; and, moreover, the limitation of the visits of the police to the boundaries of the borough only is liable to excite dissatisfaction with the free

labour beyond them, where no such officers present themselves. It is worthy of remark that in Leicester a register is required to be kept for workshops, which was one of the supposed "troublesome appendages of the Factory Act," to be dispensed with in smaller groups of associated labour.

"Dear Sir, "November 25, 1868.

"In compliance with your request I beg to forward the subjoined report, and answers to your questions.

"1st. Number of workshops, 631.

"2nd. Number of children attending school, 607.

"3rd. We require certificates to be filled up weekly, showing that each child has been at school for at least 10 hours during the week, and from inquiries made we find that their school hours are pretty equally divided, namely, two hours per day, and the greater portion of the certificates given are from schools where the master is under Government inspection.

"4th. We have had a few cases of infringement upon the hours of labour, and the parties offending have been requested to attend the meeting of the Local Board of Health, and upon giving their word not to offend again have been cautioned that if they do the case will be sent before the magistrates.

"We have had no conviction before the magistrates, the Act being upon the whole well complied with.

"5th. Our mode of visiting the workshops is to divide the town into the seven municipal wards, and keep a book for each district, in which we enter the name, trade, and situation of each workshop, with the names and ages of each child and young person employed therein. We call at each workshop, collect the school certificates, and make inquiries, for the purpose of ascertaining what changes have taken place since our last visit.

"6th. I have no additional remuneration, having held the office of sanitary inspector for several years; but I have the assistance of a police officer to enable me to carry out the provisions of this Act.

"7th. My duties are limited to the borough alone.

"I am, &c.

"J. Wright,

"R. Baker, Esq." "Sanitary Inspector.

3rdly. The Workshops Act is carried out at Leek in Staffordshire so far as it can be, in the most admirable manner by the Leek Improvement Commissioners, and their excellent inspector, Mr. Robert Farrow, and from whose communications I have made copious extracts. For *con amore*, and without remuneration, he may claim to be the pioneer of the carrying out of this Act, having entered upon the duties of inspector, first I believe, of anybody, from a mere love of kin, and of usefulness, of which, comparatively, there are such rare examples.

The Leek Improvement Commissioners, in their annual

report for March 1868, addressed themselves to the work in the following language :—

"It has also become necessary that the provisions of the Act of 1867, for the regulation of workshops, shall be carried into operation within the limits of the 'Leek Improvement Act.' This Act is in fact intended as a supplement to the 'Factories Act,' which on the whole now operates so beneficially for the working classes. It has been found that while in factories various sanitary regulations are enforced, and the hours of labour and the ages of the labouring children are subject to limitations calculated to protect and promote their health and education, these regulations have not hitherto been enforced in various buildings and workshops where young people are employed for handicraft operations, and where they are as much or even more needed than in the larger mills ; and the consequence is, that in addition to other evils in these places, children of tender years are sometimes employed in a manner detrimental to health and improvement."

And, accordingly, on the 1st of May 1868 steps were taken to put the Act in force. I subjoin Mr. Farrow's general report, made to me at my request a few weeks ago :—

"Report with respect to the working of the 'Workshops Regulation Act, 1867,' within the District of Leek in the County of Stafford.

"The Leek district, as defined by the Registrar-General of Births, Deaths, and Marriages, contained a population of 24,806 at the Census of 1861. The Workshops Regulation Act is enforced within the limits of the 'Leek Improvement Act,' which contains a population of 10,540.

"The Act was put in force on the 1st day of May 1868, since which date I have made 862 workshop inspections.

"Upon my first inspection I found 201 workshops, of which number 113 were places in which the manufacture of silk is carried on. The number of persons then employed was 1,232, which consisted of 23 persons under the age of 8 years, 233 between 8 and 13 years of age, 168 between 13 and 18 years, and 524 males and 284 females of the age of 18 years and upwards. 89 workshops were in a filthy state, which have since been cleansed and limewashed.

"During the month of August I visited 225 different places. Half-time children were employed in 91 workshops. The total number of children required to attend school, 169 ; and the total number actually attending school as required, 161.

" Number of workshops not kept in a cleanly state -	8
" Number of summonses issued - - -	2
" Number of summonses withdrawn - - -	1
" Number of persons convicted and fined for not sending children to school - - -	1
" Number of additional schools opened for half-timers	2
" Number of schools being organized - -	1

"The reasons assigned for putting the provisions of the Act in force were that much good had resulted from the operation of factory and sanitary law within the district of the 'Leek Improvement Act,' insomuch as—

"(1.) The mean age at death of males for the seven years ending 1867 was 29·1 years, and only 23·5 years during the 10 years ending 1860.

"(2.) The mean age at death of females for the seven years ending 1867 was 36·3 years, and only 25·9 years during the 10 years ending 1860.

"(3.) That 14,191 years of life (which is equal to 347 average English lives) were saved during the seven years ending 1867, as compared with the average experience of the preceding 10 years.

"(4.) That the value of male life ought to have been increased at the same rate as female life, and would have so increased had the law protected males the same as it did females.

"(5.) That male life in Leek during the last seven years, being 7·2 years shorter than female life, is mainly to be accounted for by the fact that a large number of the men and boys employed in the twisting shades never derived the slightest advantage from factory legislation.

"The above figures are deduced from the vital statistical record of our population, which, by the kind assistance of Major Graham and W. Clode, Esq., we have been enabled to compile for the last 17 years.

"I have resided in Leek for upwards of 20 years, and my experience is that where the Factory Inspector was most required he had no power to enter.

"An opinion existed in the early part of the year that the Factory Inspector would undertake to administer the Workshops Regulation Act.

"In April last an opinion was expressed that it was much more necessary to have the provisions of this Act carried out in Leek than even those of the Factory Act, and at the request of the local authority I undertook the duties of inspector for at least six months.

"Since that time I have devoted the greater portion of my time to the subject. The Local Board simply instructed me to carry out the provisions of the Act without favour or affection, and being aware that Her Majesty's Inspector of Factories had the right to come in and report my doings to the Secretary of State, I have endeavoured to proceed in the same manner as I should have done had I been directly under his control. The public, too, well understand the position in which I stand, and I therefore attribute much of our success to this provision of the Act. The only real difficulties I have had to contend with are those arising from—

"(1.) The want of a provision to require our book to be kept on the premises to which it relates.

"(2.) A provision requiring a child to attend school a given

time each day. The irregular manner in which children attend completely upset the school arrangements.

"(3.) The want of a provision giving me the same power of entry as I have in the Bakehouse Regulation Act.

"(4.) Some provision to prevent young persons and women from working more than 10½ hours per day.

"(5.) A provision to allow children of 11 years to be employed full time in the winding of raw silk same as in a factory.

"(6.) A provision to prevent parents from sending half-children to work 14 days at one place and 14 days at another, so as to keep them on full time.

"(7.) A provision to prevent children from being employed in bakehouses from 5 a.m. to 9 p.m.

"(8.) A provision giving a better definition of a factory and a workshop. Some of the Factories in Leek employ two persons, and some of the workshops employ from 40 to 50 persons.

"(9.) A provision requiring the hours of labour and the time allowed for taking meals and rest to be posted at or near the principal entrance of workshops.

"(10.) I have a number of workshops in which steam-power is employed, and it does not appear that I have power to require dangerous machinery to be fenced off the same as a factory. This is much needed.

"As far as Leek is concerned I am convinced that the 3rd section of the 'Factory Acts Extension Act, 1867,' will never work satisfactory. If a small room with two persons and a steam engine with only 3-inch cylinder to work a braid machine is to be a factory, why not large dangerous saw mills, wood turners, &c., &c.? If the first six clauses of this section were repealed, and the word ten substituted for fifty in clause 7, I do not think that the dividing line of ten would reduce the total number of workshops. The result would simply be that a number of small factories would become workshops, and a number of large workshops would become factories.

"I do not wish it to be understood that I object to a large establishment being a workshop. Indeed, I find large establishments much less trouble than small ones; but it seems so very absurd that a small printing office, employing a man and a boy, worth 2*l.* or 3*l.* a year, should be a factory, and a large silk manufacturing establishment, employing from 40 to 49 persons, worth 150*l.* a year, to be only a workshop.

"If the definition of a factory was any place were 10 or more persons were employed, it would, in my opinion, be more consistent with the evident intention of the law.

"I beg to submit the foregoing remarks and suggestions for your consideration, in the event of your deeming it desirable to recommend any alteration in the provisions of the Workshops Regulation Act.

"I am, &c.

"Robert Farrow,

"Inspector of Workshops.

"R. Baker, Esq."

I have now, I think, only to make a resumé of these reports, and to consider them along with the suggestions in the foregoing pages in connexion with the Act itself, in order to show what alterations are necessary, not only to render the Act efficient, but to place all employers of labour, great and small, upon an equal footing.

In No. 1, we see that, as in the case of Denton and Haughton, previously mentioned at page 152, the local authority, however willing that the Act should operate uniformly, has only power over part of the area of the whole district; and yet, how desirable it would be for the purposes of this Act, and because of the number and similarity of works within the district, if they were enabled to extend their present supervision over the whole area. It is for this reason I think that the local authorities, or the guardians of the poor where there is no other local authority, along with the other public bodies described in the Schedule of the Act, should be the appointers of Workshops Inspectors; and that they might determine the district over which they should have surveillance; and in case of any collision between two authorities, the power of appointment should be given to that which has hitherto had precedence in the district. The Leek district for example extends over 24,800 population, and there are commissioners in the capital of the union, who have jurisdiction only over 10,540. Can there be any reason why the operation of the Act should not be entrusted to an officer appointed by these commissioners over the whole district? On inquiry of Mr. Farrow whether he was prepared to say he could discharge the duty he now performs so well over this large area, I was answered that he could, and should be glad to do it.

Mr. Farrow's first act seems to have been to issue a notice requiring the occupiers to cleanse, limewash, and ventilate their workshops, and the result of this premonitory step was that, "with two or three exceptions," he says, "I "have succeeded in getting all workshops cleansed, and "otherwise put in order. The local authorities having "directed me to take proceedings in any case, and administer "the Act in the best way I could, and to consult with "you and Capt. May as to the difficulties, since we asked "your advice as to the dame schools, the National School "Committees have opened two additional schools."

Mr. Farrow mentions that he has visited 113 places, where the manufacture of silk is carried on. These, though textile works, have never yet been under any supervision, not employing power. The number of persons thus working at will, whilst the factory hours have been

limited to six to six, amounts to no less than 1,232 in so small a place as Leek, and of those were 23 little boys under eight years of age. The filthy state of 89 of these workshops, or very nearly one half, is precisely what might have been expected from such places where there has been no supervision over them.

He then describes his visits in the month of August last to 225 different places: "that, in 91 of them, half-time "children were employed; that the total number of children "that ought to have attended school was 169, the total num- "ber actually attending 141. Number of shops not kept in "a cleanly state, notwithstanding his former visits, eight." And from what I have witnessed elsewhere myself, I should think (with the exception of children actually at school where no attempt has been made to enforce the law,) the proportion of children to workshops, and the condition of the workshops, are very fairly described by those of which Mr. Farrow speaks.

The number of children that were at school, compared with those who ought to have been, points to the effect of the law on the employers. On most it had operated duly; on some, not at all. They were "waiting till they had been found out," knowing "that they should not be prosecuted for a first offence," which has always been a common practice.

The useful results of sanitary care over factory works as shown at Leek, and given as reasons for putting the Workshops Act in force, are interesting and conclusive. It was with a view of strengthening Mr. Farrow's hands that, a few weeks ago, I visited, in company with him, many of the Leek workshops; and it was easy to see how salutary my presence was, with an officer in Mr. Farrow's position.

And now, in approaching the difficulties which Mr. Farrow has experienced in administering the Workshops Act, I will endeavour to be as concise as possible; but they are very important, because they are not hastily determined by him, but are the result of careful practical experience; and more or less, they present themselves as difficulties to other persons wishful to carry out the Act, but who are deterred by them.

Mr. Farrow's idea of what is still necessary is as follows:—

(1.) "The want of a provision to require our book to be "kept on the premises to which it relates."

"Our book"—what book? A register of children. And the keeping of some such book we find also is the practice of Leicester. We do not however find in the Act any

mention made of any abstract of the Act, or of the time for meals, being hung up in the workshop, nor for any register whatever being kept. Why? Because it was believed that these preliminaries, however essential, were troublesome and annoying, and could and ought to be dispensed with. Yet, in the practical working of the Act, they are found to be the primary requirements in workshops, as undoubtedly they are in factories; for without a register of workers on the premises, who shall know who are the workers and who are strangers therein?

What are the contents of Mr. Farrow's "our book?" First, it contains a preface, in other words an announcement of the intentions of the Legislature in passing such an Act,—then an abstract of the Act, ample enough for a guide, yet brief enough not to be troublesome,—then, a page for entering limewashing, and lastly a few pages for certain entries when needed.

The preface, printed on the inside of the back, is worthy of being extracted, and is as follows:—"The following "abstract and forms are prepared with a view of enabling "the occupiers of workshops to carry into effect the intention "of the Hours of Labour Regulation Act, with as little "expense and inconvenience as possible. Experience shows "that, however careful the employers of children and young "persons may be in their endeavours to comply with the "terms of the various Factory Acts enactments, they "frequently find themselves imposed upon by persons mis-"taking the ages of children. Should this occur under the "Workshops Regulation Act, it would render the employer "liable to serious inconvenience and expense, and he cannot "protect himself more effectually than by correctly filling "up from time to time the several forms provided. If this "is done, he will at any time be in a position to satisfy "both the inspectors and local authority that he has done "his best to carry out the intentions of the Legislature "with respect to the matters therein referred to."

The first page contains the following subject matter in several lines:—

"Workshops.

"Name of occupier. Situation of workshop , in the "parish of . Nature of the handicrafts carried on. "By what clock regulated. Name and address of chief officer "empowered to inspect workshops. Name and address of "officer appointed by local authority."

Mr. Farrow adds a note, "This book is kept in nearly all the workshops in the Leek district."

Page 2 contains a careful summary of the Act, infinitely better than any large abstract for these small works, which only entails great expense on the Government, is hardly ever read, and in many instances misleads the reader for want of his understanding its arrangements.

Page 3 contains the summary of penalties.

Page 4 is devoted to the whitewashing clauses, and the remaining pages to the following details :—

LIST of Children between 8 and 13 years of age employed in this workshop.

Surname.	Christian name.	Date of Birth.	By whom supplied.	Date of first day of being employed or re-employed.	Signature of Medical Officer of Health.	When any person ceases to be employed insert opposite the name the word left.

On the side of the line of the signature of the officer of health are these words: "I have examined the "persons opposite to whom my signature is affixed, and "have no reason to doubt the statement respecting their "ages, and I consider them physically capable of performing "the work on which they are employed."

This is the unpretending but eminently useful book now in use in nearly all the workshops in Leek. There is no difficulty about it whatever; and by it, Mr. Farrow is enabled to detect at once any altered condition of the hands subsequently to his last visit. I consider such a book essential absolutely, to the well working of the Act; since without it, no sure knowledge can be had of the real workers within the premises. It does not, like the factory register, refer to young persons or women, which is not necessary in small workshops, but only to children, as a means of ascertaining their age, health, and attendance at school.

(2.) "A provision to require a child to attend school a "given time each day."

The 14th section of the Act, requiring children to attend school ten hours a week, and section 16, which appears to admit of children being employed 14 days without schooling, and that the school certificate need only be shown to the Inspector or Sub-Inspector of Factories within a month of its date if required during that month, are found to be

pregnant with great irregularities. In the first place, the hours of schooling during a week, may be five hours a day for two days if the child is out of work, and then, overtime for the remainder of the week, if not detected. Or it may be three hours a day for three days, and then one hour; or, it may be varied in a variety of other ways, so as to produce the most unsatisfactory disarrangements in the school classes. Mr. Farrow further reports on these sections:—"Some people "will, and do, send children to school on two whole days, and "work them more than the six and a half hours the other "days, especially silk twisters, who are in the habit of "devoting a portion of the week to drinking." The schoolmaster also writes of this irregular attendance, as follows:—"I find a great difficulty with the half-time "children attending my school, which prevents the teacher "from giving Her Majesty's Inspector satisfaction, con-"sequently no grants and a disgrace to the school. Can "anything be done to cause them to attend school every "day?" Add to this the testimony of the certifying surgeon, who, in a letter dated September 7, 1868, says:—

"I should just like to refer to the exceeding desirableness of arranging either that the children go to school morning or afternoon. What I mean is, that they should not go to work in the morning, then go to school for two hours, and be worked again the same afternoon. This is done regularly here, and seems to make the Act useless, so far as the benefit of the children is intended. Another point needing attention is the mode by which the employers get out of the duty of sending children to school at all, because they say they have not employed them 14 days. They send them away at the expiration of that time, and take fresh ones to serve in the same way. These are matters which certainly require alteration to make the Act a satisfactory one."

All this difficulty and trouble would be avoided by assimilating the clauses of the Workshops Act to those of the Factories Acts; for, says Mr. Farrow, in a letter dated September 19, "on Thursday last, two occupiers of "workshops came to complain of what they called my "unfair dealing; that I had required them to send certain "children in their employ to school, and that, in con-"sequence, their parents had taken them away and sent "them to a certain factory where I allowed them to work "full time. I explained that they were factories, and I had "no power to interfere. Their reply was, 'You stopped us, "and we demand that you stop them too.'" Mr. Farrow adds, "The schools complain much of the irregular manner in "which workshop children attend school. Many send them "two whole days, on what we call 'taking-in' days, which

" gives me a great deal of trouble with respect to the $6\frac{1}{2}$ " hours the other four days. If the certificate was the same " as in factories, it would very materially aid me in " checking this objectionable practice."

(4.) " Some provision for preventing young persons and " women working more than $10\frac{1}{2}$ hours a day."

The words of the Act are, " No young person or woman " shall be employed for more than 12 hours, with inter- " vening periods for taking meals and rest, between 5 a.m. " and 9 p.m." The law officers of the Crown have lately decided that this is to be interpreted as $10\frac{1}{2}$ hours' actual work, exclusive of meal times, and thus it needs expressing,—

(5.) " A provision to allow workers in silk of 11 years of " age, to work $10\frac{1}{2}$ hours a day, same as in a factory."

This is to assimilate the labour of children in workshops to that in factories, which is reasonable. It only refers to winding and throwing, and not to any other process.

(6.) " A provision to prevent parents sending half-time " children to work 14 days at any one place, and then " 14 days at another, so as to keep them working full time," *i.e.*, to repeal clause 16, which seems at first sight to permit an occupier to employ a child for 14 days before sending it to school.

This and clause 14, sect. 1, are rather ambiguous. (1.) Clause 14 seems not to require schooling unless the child is employed the whole of the week, and the time of a child's employment in clause 16 may be intermittent for many weeks before the whole term of 14 days is made up. The proper principle to be adopted seems to be that of the Factory Act, in which a child employed any day in any week must attend school the whole of that week.

(7.) " A provision to prevent children being employed in " bakehouses from 5 a.m. to 9 p.m."

This will be best done by repealing the Bakehouse Act, now that all such places would fall either under the Factory Act or Workshops Act. Many large bakeries have no supervision whatever.

(8.) " A provision giving a better definition of a factory " and a workshop."

Mr. Farrow thinks that the dividing line of 50 hands between the two should be reduced to 10, and gives his reasons for it. I think the dividing line should be reduced

to seven, and be prospective and retrospective; *i.e.*, that all the works now under the Factory Act, 1867, where seven persons only are employed, should be deemed to be workshops, whether employing power or not, and all works employing above that number, factories.

(9.) "A provision for a labour and meal hour notice to "be hung up at the entrance of the workshop, as is "now the case in factories."

Finally, Mr. Farrow sums up his opinion of the Workshops Act as follows:—

"Experience in Leek has long since convinced me that Factory Acts were much more needed in small works than in large mills. As a rule, I find it much less difficult to manage a large establishment than a garret. In the former you always have an intelligent man of business to do with, but not so in the latter. . . Nearly all my time, during the last two or three months, has been devoted to these workshops, and my decided opinion is that a judicious administration of an amended Hours of Labour Act, would in a very few years produce a great physical and moral change in the working population of this district."

And adds the following anecdote with respect to the possession of intellectual power, especially as coming under his own notice:—

"A number of 'full' and 'half-time boys' were disputing in the street as I passed by. I went aside and observed them. A 'full-time' boy, addressing the half-timers, observed, 'I say, Luke, 'that's the man as licks yer three and threepence lads' (alluding to deducting the school wage from it). After a slight skirmish, and a good deal of disputation, a half-timer stepped forward and made a vigorous attack upon the conduct and ignorance of the full-timers, who were about to resist the insult, when, up steps another half-timer, and said, 'Now, as you 6*s*. 6*d*. lads can't 'understand arguments, I will just show you what it is that licks 'you.' He then wrote his name in a good bold hand, and turned the paper to his adversaries, saying, 'Look you, that's what it is 'that licks (beats) you all.'"

Mr. Farrow, as well as Mr. Dyke and the police at Leicester, has been enabled to furnish the statistics of the workshops under his supervision, which I introduce to show how valuable they would be, in conjunction with my Factory Tables, if both were collected everywhere. We should have, in fact, then the entire statistics of all our industrial occupations.

LEEK Workshops' Inspector's Report for the Month of October 1868.

Number of Workshops visited.	Number of Inspections made.	Number employing Half-timers.	Number of Half-timers.	Number attending School.	Other Workshops where the Act was evaded.	Number of Persons proceeded against.
229	237	101	196	184	7	2

Branch of Handicraft.	Total Number of Persons employed.	Children under 13 Years of Age.	Young Persons between 13 and 18 Years.	Above 18.	
				Men.	Women.
Silk winding and doubling	508	133	65	57	243
Silk twisting, picking, and balling.	322	97	56	169	—
Silk weaving	36	7	—	27	2
Other workers in silk	14	2	1	7	4
Paper box makers	24	8	5	4	7
Milliners and dress-makers	81	1	17	—	63
Boot and shoe makers	48	—	6	34	8
Tailors	41	—	4	37	—
Workers in wood	111	8	25	77	1
Rope spinning	17	7	1	9	—
Workers in metal	29	1	1	27	—
Tin plate workers	5	—	2	3	—
Tanning and currying leather	7	—	—	7	—
Saddle and harness makers	6	—	1	—	5
Workers in paint and varnish.	32	—	4	28	—
Patent candle makers	6	1	—	1	4
Brickmakers	21	5	4	—	12
Public baking and confectionery.	51	5	5	4	37
Public brewing	5	—	—	—	5
Total	1,364	280	197	338	549

NOTE.—John Beard, of Leek, was fined 1*s.* and costs, 15*s.* 6*d.*, for not sending his child to school, and for nonpayment was committed to prison for seven days. I withdrew two cases in October to save the costs, the persons being poor.

(Signed) ROBERT FARROW.

I have thus attempted to give Mr. Farrow's practical opinions, and I wish to add, in the main I agree with him. The cases in the note, confirm what I have said in my previous reports of the desirableness of lowering the fees of convictions in the case of workmen.

That the Hours of Labour Act is right in principle

nobody can deny, and with emendations might be most effective. And these, Sir, I will now, with deference, venture to offer to your notice.

1st. I am of opinion that the Bakehouse Act should be repealed. In several parts of my division the largest bakeries are unvisited, the local authorities having neglected to appoint anybody to that office or duty. All such works would thus either be subject to the Factory Act or the Labour Regulation Act.

2nd. That the dividing line of 50 persons between the two Acts should be reduced to seven persons employed in any handicraft; *i.e.*, that all places, whether power is employed or not, defined as places of manufacture or handicraft, and whether factories or workshops under either law as it stands, should henceforth, wherever seven persons or upwards are employed, come under our inspection; and that all works in which less than seven persons are employed shall be deemed to be workshops, and be inspected by persons appointed by the local authority.

3rd. That the hours of labour of all children and young persons, and the hours of education of children, should be the same in both Acts.

4th. That paragraph 4, section 6, should be altered so as to prevent Sunday labour—to read in fact "on "Sunday, nor after two o'clock on Saturday, &c. &c."

5th. Section 9 should be repealed, which requires a person to make a complaint before a justice, in order to obtain the right of entry into any workshop.

6th. That after the word "therein" in section 10, the following words should be added, namely, "and take "such steps as he may deem advisable for enforcing "the provisions of this Act, under the powers and "provisions of the Factory Acts or any of them," so as to enable the Inspector of Factories to direct the workshops' inspector in the discharge of his duties.

7th. The application of penalties should be to the education of children actually employed in workshops, who may be too poor to have any deductions made from their wages; and the words therefore in section 12, "in the "manner directed by the Acts referred to in this "section" should be erased, and "as penalties under "the Factories Acts are directed to be applied" should be substituted.

8th. That the 14th, 15th, and 16th clauses relating to the education of children should be omitted.

9th. That the local authority should appoint workshops' inspectors and pay their salaries, &c., &c., out of the rates, in proportion to the number of workshops in each district, and the miles to be travelled. That in case of no such appointments being duly made within three months of the passing of the Act, then on the report of the Inspector of Factories, the Secretary of State should appoint. That on appointment, the inspector of workshops should be subject to the sole control and direction of the Inspector of Factories, and not the local authority.

10th. That for the purposes of this Act, the word night shall mean between 6 p.m. and 6 a.m. of the next day, and 7 p.m. and 7 a.m., according to the winter or summer season.

I think too, that for the sake of the utmost uniformity of action, the chief Inspectors should agree upon a rule to be sanctioned by the Secretary of State, as to what kind of works in either Act should be permitted relaxations till July 1870, (when several modifications will have expired,) so as to give both Acts further trial.

That absolute uniformity of action may not have existed hitherto in both districts is not to be wondered at, when all the circumstances attendant on the administration of the Factory Acts Extension Act, 1867, are taken into consideration. Pressed on all hands in so many trades, from so many localities, and under the most varied forms, to recommend modifications of the Act, often from personal or local considerations more than from real necessity, it could not have been anticipated that an à priori perfect agreement could be arrived at, as to those that could be jointly recommended for permanent adoption. But after a little longer trial, and with the Secretary of State for arbiter on the reasons given, a rule could be well laid down for different kinds of works, which it is most desirable should be. Such a rule would relieve each Inspector from any imputation of an arbitrary administration of the law; and it would prevent divided opinions where unison is so desirable.

If it is asked of me whether my present staff would enable me to carry out the Factory Acts Extension Act, 1867, with the new phase put upon it by the addition of the workshops employing between 7 and 49 hands, I should reply not; but I do not anticipate any great enlargement of it would be requisite. I believe if those I have already were better paid, and more encouraged, three or four more sub-inspectors would be all that I should need. It is possible, I think, that

the number of factories already under the Factory Acts Extension Act, in which fewer than seven persons are employed, to be taken out of the list of the Sub-Inspectors and added to workshops, would go some way in compensating for those where more than seven persons are employed, to be henceforth taken from workshops and added to factories: and that, as in course of time each Sub-Inspector would know better whom to trust and whom to visit often, a considerable number of higher class works might be left to visitations longer apart, and thus more time might be devoted to smaller establishments. In this way the labour of the whole would become easier.

If the alterations which I have the honour to suggest were carried into effect, my belief is that both Acts would give as much satisfaction as any such restrictive measures can ever hope to give; for at least the laws relating to labour would be uniform in all classes of works.

And if we may build upon Leek and Leicester as examples of the visitatorial benefit to be derived from these Acts, the result would undoubtedly be not only a uniformity of hours of work, but that all children, except those that never work, would be found at school in the day; and leisure would be afforded to all willing adolescents for improving their previous education, after work was over. At all events the present desecration of human intellect by parental apathy or ignorance, or by a mammonistic slavery, would no longer obtrude itself upon us with the force which, even in these days, we see it; and in a few years it would have ceased, as nearly, perhaps, as it ever may.

No one can doubt but that, to accomplish such a task as this, there is a great work foreshadowed for us. But it is necessary for our security as a people: and it is not so difficult of accomplishment as it seems; and moreover, it is the sure forerunner of similar efforts amongst the industrial nations of Europe. For if there were no higher motive to lead us on to its accomplishment, the very humanity there is in it, familiar to all who know in what condition vast numbers of the people exist, and how they live, will be accepted and is worthy of imitation by other countries, for the changes which are coming upon them as upon us, and for which preparation ought now to be made, and matured by the wisdom that will grow out of it.

With respect to the Hours of Labour Act, in every case where my advice has been asked on points relative to or arising out of its administration by others, I have given it to the best of my ability. But I have not felt it within my duty to prepare any abstract of it, nor to furnish any papers or

documents with respect to it, at the public expense. The local authorities are the persons solely entrusted by the Act with its administration: and it seemed to me that, if Parliament had intended the Inspectors of Factories to interfere beyond the three or four points laid down for their guidance, that intention would have been found among the enactments. One thing I did, certainly, but only one, and that was upon great external pressure from many quarters, to take the opinion of the Birmingham Chamber of Commerce on the desirableness of assimilating these two Acts of Parliament, in order that labour in all works might be uniform. Fifty of the leading manufacturers of the town represented the Chamber upon that occasion, and after a discussion of nearly three hours, the following resolution was carried by 41 to 9:—

"That in the opinion of the Birmingham Chamber of Commerce, the Factories Act being now in operation in Birmingham and the district, it is desirable that the Workshops Regulation Act should be so amended as to make its provisions substantially the same as those of the Factories Act, and that efficient means should be provided to enforce it, so that the law may be equal for all."

Workshops visited in Mr. Baker's District, and Condition thereof.

The following is a list of the workshops visited by me or by one or other of my Sub-Inspectors between the 1st of February and the 14th of November 1868, and their condition:—

Feb. 17. Leighton Buzzard. John Parratt, straw plaiter. Room in a cottage house. 34 children of from 3 to 16 years of age. Room hot and offensive. Children come at 9 and leave at 4. Others, as well as part of these, come at 5 p.m. and stop till 8.30. Each child makes about 30 yards a day.

Mrs. Baines, straw plaiter. 36 plaiters. Room close, but not so offensive as in last case. 19 children under 6 years old; the youngest 5 last birthday.

Ivinghoe. Name not taken, straw plaiter. Work, from 8.20 to 4.30, with an hour for dinner. A national school. Schoolrooms large. Mistress attentive. Plaiting a part of instruction.

Called at several other schools of this kind, but as the work was all alike, particulars were not taken.

Feb. 21. Bedfordshire. Mrs. Coling, rush mat maker. Boys, all; 4 or 5 in number, and bigger.

Ann Underwood, ditto, ditto. Shops not amiss for such work.

Thos. Smith, osier worker. A few boys at work. Hours not irregular. Girls assist also in bundling the osiers.

Called at several other small works of a similar character.

March 7. Worcestershire. Humphries and Hughes, carpet manufacturers. No steam employed. Wretched tumble-down places, and most dangerous to ascend and descend at night. Several small "sword drawer" boys at work for the men. Rooms had not been swept down or whitewashed for years. Some of the children employed, scarcely 7 years old. Till lately, such children had been employed till 8 or 9 p.m.

July 31. Staffordshire. Sarah Woodhouse, nail maker. Ordinary nail shops, just a hearth. Works from 7 a.m. to 9 and 10 p.m. Used to stop at 6 p.m. till wages fell. Cannot get a living now at old hours. Stops 20 mins. three times a day, for meals.

Mrs. Trowman, aged 60, and assistant, aged 40, nail makers. Doing her husband's work at 10 p.m., who is sick. Must do this or starve.

Mary and Esther Trowman, sisters, nail makers. Working at 9 p.m. to finish father's work; will finish at 11 p.m.

John Wright and three young girls, nail makers. At work at 9.30, would finish at 11 p.m.

Geo. Baggerley, wife, and 2 young boys, nail makers. Borrowed a bit of work to get Sunday's dinner. Look poverty stricken. Can't live on 12 hours' work a day.

Jos. Weavers, nail maker. Two women at work at 10 p.m.

James Boyle, wife, and daughter, nail makers. At work at 10.15 p.m. Have stood many weeks for iron before they could get this job.

9 to 14 Nov. Cheshire. Brown, blacksmith. 2 men employed.
H. Fogg & Co., hatters. 20 workers, none under 12.
L. Broadhurst, hatter. 5 workers, none under 12.
Basley, Cranner, & Basley, hatters. 18 workers, under 12, 2. Children work half time; one goes to school, the other not.
L. Inman, nailer. 4 workers, none under 12.
T. Torkington, smith. 3 workers, none under 12.
F. Kell, smith. 2 workers, none under 12.
G. Mason & Son, hatters. 14 workers, none under 12.
Wardle & Smith, hatters. 21 workers, under 12, 1. Child works full time and does not go to school; will now be discharged.
Linney & Wyatt, hatters. 16 workers, none under 12.
J. & P. T. Moore, hatters. 42 workers, under 12, 2. Children both work half time and go to school, but had no school certificates to produce.
G. Masten & Son, hatters. 45 workers, none under 12.
F. Master & Son, hatters. 20 workers, none under 12.
Higginbothan & Olden, hatters. 30 workers, none under 12.
J. B. Brown, hatter. 15 workers, none under 12.
Thos Whitaker, hatter. 7 workers, none under 12.
J. Howe & Son, hatters. 47 workers. none under 12.

Sept. 4. Leek, Staffordshire. Saml. Eyres, silk winder. 8 workers, under 12, 3. Children attending school. Satisfactory.
William Birch, silk winder. 24 workers, under 12, 2. Children attending school. Rooms in a filthy state. Inspector's notice to cleanse and limewash not complied with.
John Prince, winder and twister. 14 workers, under 12, 4. One child not attending school. Rooms and premises in a dirty dilapidated state, the Inspector's notices not having been complied with.

Ralph Mountford, rope spinner. 5 workers; 2 at school. Satisfactory.

James Buxton, silk winder. 3 workers; 1 child at school. Workshop a dirty garret. Inspector's notice to whitewash not having been complied with.

John Rushton, winder and twister. 20 workers; 5 children at school. Satisfactory.

Called also at the following schools:—

Union St., Congregational,	half-timers attending,		19.
St. Luke's, Church,	„	„	18.
Bull Hess, Wesleyan,	„	„	11.
Fountain St., Church,	„	„	42.

I have the honour to be,
Sir,
Your most obedient servant,
ROBERT BAKER.

Her Majesty's
Principal Secretary of State
for the Home Department,
&c. &c. &c.

INDEX TO SUBJECTS AND RECOMMENDATIONS CONTAINED IN THIS REPORT.

FACTORIES ACT EXTENSION ACT 1867.

	Page.
Labour required in commencing to administer the Act	82 and 83
Example of special Provisions issued to each Manufacturer	85
Subdivision of the whole District, Mileage, and annual cost of Visitation	88
Summary of Works in England, Wales, and Ireland, summary of Counties	89
Summary of Trades in England and Wales	91 to 96
Detail of Trades, &c. in Counties in England and Wales	99 to 125
Summary of Trades in Counties in Ireland	126 to 128
Detail of Trades in Counties in Ireland	129 to 135

SPECIAL ARTICLES ON THE FOLLOWING TOPICS.

Letter-Press Printing	139
Straw Bonnet Makers	158
Salt Trade	163
Slate Quarries	164
Shipyards and Marine Engineering	175
Iron Works	181
Glove Trade	184
Clothes Trade	185
Boot and Shoe Trade	185
Hat Trade	186
Holidays	187
Apprentices	187
Night Work	188
Employment of Married Women	192
Certifying Surgeons	195
Accidents	205
Factory Schools	217
Reports of Sub-Inspectors on the operation of both Acts	232
Prosecutions under the Factory Acts	278

HOURS OF LABOUR REGULATION ACT.

Manufacturers, observations on the unfairness of the Act	291
Nailers of Sedgeley, character of, morals, &c.	295
Chain Makers	300
Plaiting Schools	303
Watch Movement Makers	306
Locksmiths and Hinge Makers	310
Report of Birmingham Trades Council on both Acts	312
Reports from Warrington, Lymm, Northampton, Denton, Leicester, Merthyr Tydfil, and Leek	317 to 331
Recommendations, answers thereupon	332
Workshops visited and conditions thereof	335

LONDON:
Printed by George E. Eyre and William Spottiswoode,
Printers to the Queen's most Excellent Majesty.
For Her Majesty's Stationery Office.

REPORTS

OF THE

INSPECTORS OF FACTORIES

TO

HER MAJESTY'S PRINCIPAL SECRETARY OF STATE
FOR THE HOME DEPARTMENT

FOR THE

HALF YEAR ENDING 30TH APRIL 1869.

Presented to both Houses of Parliament by Command of Her Majesty.

LONDON:
PRINTED BY GEORGE E. EYRE AND WILLIAM SPOTTISWOODE,
PRINTERS TO THE QUEEN'S MOST EXCELLENT MAJESTY.
FOR HER MAJESTY'S STATIONERY OFFICE.

1869.

REPORTS

TO THE RIGHT HON. H. A. BRUCE, M.P.

Her Majesty's Principal Secretary of State for the Home Department.

	Page
Joint Report of Inspectors for the half-year ending 30th April 1869 -	3
Report by Alexander Redgrave, Esq. ditto. ditto. - -	8
Report by Robert Baker, Esq. ditto. ditto. - -	72
Appendix to Mr. Baker's Report for six months ended 31st Oct. 1868 -	140

Half-yearly Joint Report of the Inspectors of Factories.

Factory Inspector's Office,
10, *Whitehall,*
London, S.W., 2d Aug. 1869.

Sir,

We have the honour to transmit to you our reports for the half-year ending the 30th of April last.

We have been unable, by very pressing engagements, from completing them earlier; and for the same reason we are prevented offering with them to you any joint recommendation.

We have the honour to be,
Sir,
Your obedient servants,
Alex. Redgrave.
Robt. Baker.

The Right Hon.
The Secretary of State
for the Home Department,
&c. &c. &c.

Joint Appendix No. 1.

General Abstract, showing the Total Number of Accidents reported to the Inspectors of Factories during the Six Months ended the 30th April 1869.

Table No. I.—*Accidents arising from Machinery.*

Nature of Injury.	Adults.		Young Persons.		Children.		Total.		
	M.	F.	M.	F.	M.	F.	M.	F.	M&F.
Causing death	35	2	7	3	6	–	48	5	53
Amputation of right hand or arm	11	4	5	3	–	–	16	7	23
Amputation of left hand or arm	9	–	6	–	–	–	15	–	15
Amputation of part of right hand	75	21	77	37	18	7	170	65	235
Amputation of part of left hand	68	31	41	28	12	7	121	66	187
Amputation of any part of leg or foot	4	–	1	–	–	–	5	–	5
Fracture of limbs or bones of trunk	93	10	63	9	13	2	169	21	190
Fracture of hand or foot	76	15	40	32	7	10	123	57	180
Injuries to head and face	60	21	31	31	10	4	101	56	157
Lacerations, contusions, and other injuries not enumerated above	632	229	709	236	124	62	1469	527	1996
Total	1067	333	980	379	190	92	2237	804	3041

Table No. II.—*Accidents not arising from Machinery.*

Nature of Injury.	Adults.		Young Persons.		Children.		Total.		
	M.	F.	M.	F.	M.	F.	M.	F.	M&F.
Causing death	66	3	6	–	4	–	76	3	79
Amputation of right hand or arm	1	–	1	–	–	–	2	–	2
Amputation of left hand or arm	1	–	–	–	–	–	1	–	1
Amputation of part of right hand	32	2	8	4	2	–	42	6	56
Amputation of part of left hand	25	2	10	1	–	–	35	3	38
Amputation of any part of leg or foot	8	–	1	–	–	–	9	–	9
Fracture of limbs or bones of trunk	167	9	56	5	14	–	237	14	251
Fracture of hand or foot	93	1	17	1	1	–	111	2	113
Injuries to head and face	532	10	169	8	10	–	711	18	729
Lacerations, contusions, and other injuries not enumerated above	2962	44	750	42	55	13	3767	99	3866
Total	3887	71	1018	61	86	13	4991	145	5136
Total Number reported	4954	404	1998	440	276	105	7248	949	8177

Joint Appendix. No. 2.

Summary of the Total Number of Informations and Convictions and the Amount of Penalties and Costs in the Districts of the Inspectors during the Six Months ended the 30th of April 1869.

Description of Offence.	Number of Informations.	Result.			Penalties imposed.							
		Convictions.	Withdrawn on Payment of Costs.	Dismissed.	5*s.*	10*s.*	20*s.*	30*s.*	40*s.*	50*s.*	£3.	£5.
Neglecting to fence mill gearing	1	—	1	—	—	—	—	—	—	—	—	—
Neglecting to fence mill gearing, whereby bodily injury was caused	1	1	—	—	—	—	—	—	—	—	1	—
Allowing children and young persons to work between the fixed and traversing parts of a self-acting machine whilst in motion	1	1	—	—	—	—	—	—	1	—	—	—
Employing children and young persons without registering their names and date of first employment	58	23	33	2	—	—	3	—	20	—	—	—
Employing children and young persons without surgical certificates	75	30	45	—	—	—	3	—	27	—	—	—
Employing children before noon and after one o'clock p.m. of the same day	25	15	10	—	—	—	14	1	—	—	—	—
Employing children without school vouchers	19	13	5	1	—	1	5	4	2	—	1	—
Employing children, young persons, and females at night	51	36	15	—	—	—	5	—	10	—	2	19
Employing children, young persons, and women after six o'clock p.m.	102	68*	34	—	—	—	57	—	3	6	—	—
Employing women in dye-works after six o'clock p.m. without registering	1	1	—	—	—	—	—	—	1	—	—	—
Employing children, young persons, and women after seven o'clock p.m.	14	6	7	1	—	—	3	—	3	—	—	—
Employing women after eight o'clock p.m.	15	10	5	—	—	—	10	—	—	—	—	—
Employing children, young persons and women after two o'clock on Saturday	12	9	1	2	—	—	8	1	—	—	—	—
Carried forward	375	213	156	6	—	1	108	6	67	6	4	19

* Two convicted in costs only.

Joint Appendix—*continued.*

Description of Offence.	Number of Informations.	Result.			Penalties imposed.							
		Convictions.	Withdrawn on Payment of Costs.	Dismissed.	5*s.*	10*s.*	20*s.*	30*s.*	40*s.*	50*s.*	£3.	£5.
Brought forward	375	213	156	6	—	1	108	6	67	6	4	19
Employing young persons after half-past four o'clock on Saturday	3	—	3	—	—	—	—	—	—	—	—	—
Employing young persons and women during meal hours	6	3	3	—	—	—	2	—	—	—	—	—
Employing young persons more than ten and a half hours per day	6	6	—	—	—	—	1	—	5	—	—	—
Employing young persons on a Sunday	8	1	7	—	—	—	1	—	—	—	—	—
Illegal employment of young persons in iron mills, saw mills, printing offices, &c.	7	6	1	—	2	1	3	—	—	—	—	—
Parents employing or conniving at the illegal employment of their children	3	2	1	—	—	1	1	—	—	—	—	—
Parents neglecting to cause their children to attend school	4	4	—	—	3	1	—	—	—	—	—	—
Neglecting to give notice of accident to the certifying surgeon	2	1	1	—	—	—	—	—	1	—	—	—
Not keeping a register	1	—	1	—	—	—	—	—	—	—	—	—
Not lime washing, as required by law	2	2	—	—	—	—	—	—	—	—	2	—
Not producing registers, certificates, &c.	1	—	—	1	—	—	—	—	—	—	—	—
Not hanging up abstract of Acts, notices of hours of work, meal times, &c.	5	3	2	—	—	—	—	—	3	—	—	—
Making false entries in the register of young persons	4	1	3	—	—	—	—	—	—	—	—	1
Wilful obstruction of the sub-inspector in the execution of his office	3	3	—	—	—	—	—	—	—	—	3	—
Total	430	245	177	7	5	4	116	6	76	6	9	20

The total amount of fines inflicted, £422 5*s.*
The total amount of costs, £154 10*s.* 9*d.*

JOINT APPENDIX No. 2, appertaining to Factory Report for 31st October 1868.

GENERAL ABSTRACT showing the total Number of Accidents reported to the Inspectors of Factories during the Six Months ended the 31st October 1868.

TABLE No. I.—*Accidents arising from Machinery.*

Nature of Injury.	Adults.		Young Persons.		Children.		Total.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.&F.
Causing death	38	1	17	–	–	2	55	3	58
Amputation of right hand or arm	9	6	4	1	2	1	15	8	23
Amputation of left hand or arm	12	5	8	1	–	1	20	7	7
Amputation of part of right hand	70	34	61	44	12	15	143	93	236
Amputation of part of left hand	53	16	41	25	11	9	105	50	155
Amputation of any part of leg or foot	2	–	6	–	1	–	9	–	9
Fracture of limbs and bones of trunk	38	13	49	8	9	5	96	26	122
Fracture of hand or foot	40	23	17	30	10	4	67	57	124
Injuries to head and face	42	29	35	19	7	3	84	51	135
Lacerations, contusions, and other injuries not enumerated above	572	212	529	273	123	60	1224	545	1769
Total	876	339	767	401	175	100	1818	840	2658

TABLE No. II.—*Accidents not arising from Machinery.*

Nature of Injury.	Adults.		Young Persons.		Children.		Total.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.&F.
Causing death	40	3	16	1	2	–	58	4	62
Amputation of right hand or arm	2	–	–	–	–	–	2	–	2
Amputation of left hand or arm	4	–	1	–	–	–	5	–	5
Amputation of part of right hand	34	–	9	–	4	–	47	–	47
Amputation of part of left hand	19	1	7	1	–	–	26	2	28
Amputation of any part of leg or foot	8	–	4	1	–	–	12	1	13
Fracture of limbs or bones of trunk	128	5	49	4	10	2	187	11	198
Fracture of hand or foot	59	1	6	1	1	–	66	2	68
Injuries to head and face	219	9	115	6	15	2	349	17	366
Lacerations, contusions, and other injuries not enumerated above	1964	44	563	36	64	6	2596	86	2682
Total	2477	63	775	59	96	10	3348	123	3471
Total number reported	3353	402	1542	451	271	110	5166	963	6129

HALF-YEARLY REPORT of ALEXANDER REDGRAVE, ESQ., for the six months ended the 30th April 1869.

Factory Inspectors' Office, 10, *Whitehall,*
London, S.W., 10*th June* 1869.

SIR,

I HAVE the honour to submit to you my usual report.

Having gone at some length in my last report into the various points of interest in the recent legislation, it is unnecessary for me to refer to them in detail at the present moment.

I cannot refrain, however, from again noticing the question of the reporting of accidents under the Act of 1867, as entailing needless regulations upon manufacturers, useless occupation of certifying surgeons, and wasteful expenditure of the public money. There were 4,313 accidents reported during the half-year, and 2,379 of these were not caused by machinery, and, but for the express enactment that every accident should be reported, need not have been noticed. Of the other accidents, 1,934, a very large proportion were trivial and the result of the carelessness of the sufferers themselves. The Factory Act of 1844 enacted that *every* accident should be reported. The obligation to report was not made dependent upon the fact of the accident having been caused by machinery, because it was thought that there would be but few accidents not so caused. In Yorkshire and Lancashire this opinion was justified by the event, and immense good followed. The majority of reports did in fact call attention to circumstances of danger and suggest the means of their removal. But in works under the Act of 1867 the number of reports, which do nothing of the kind, has become too great to be disregarded. In these works the employments are for the most part independent of machinery, while the accidents happen as it were in the ordinary course of events, and not as consequences of any preventable danger. Now reports of accidents can only be useful where danger is preventible. I would, therefore, in the works under the Act of 1867, restrict the accidents reported to those occasioned by machinery; and I consider that by this means all possible protection would be afforded to those employed. That this may be done with safety will be seen from the very small number of females and children who have been injured by accidents not caused by machinery. Out of 2379 of such accidents, 33 only happened to women, 18 to girls, and 55 to children; the number happening to men being 1,863, or about four fifths of the whole.

The number of fatal accidents is large, but very few appeared to be preventible, and none come exactly within the reach of those sections of the Act which require mill gearing to be securely fenced.

16	persons	fell from a height.
5	„	were scalded.
7	„	were found dead.
14	„	were killed by the falling upon them of iron, &c., &c.
2	„	were run over.
6	„	fell down.
2	„	were killed accidentally.
1	„	was drowned.
1	„	was killed by the accidental explosion of a pistol.
6	„	fell down a hoist.
9	„	were killed while at work at various machines.
8	„	were killed from going or working too near shafting.
3	„	were killed by shafting.
80		

Of the above number,—

63	were	men.
4	„	women.
7	„	male young persons.
2	„	female „
4	„	male children.

Although there have not been any accidents which appeared to me of such a nature as to require a prosecution for neglect to guard machinery effectually, yet it must be borne in mind that by the common law of the land an employer is bound to provide all proper and necessary protection for those whom he employs; that he is liable to actions for damages if persons in his employment are obliged in the course of their occupation to place themselves in jeopardy and are thereby injured. Such cases have been tried again and again, and substantial damages awarded to injured persons. And I have no doubt that in many cases of accidents the employers are clearly liable to make some provision for injured persons, and would be cast in damages if the cases went into court. The accidents caused in the works under the Act of 1867 are of such a different nature from those caused in textile factories that the same regu-

lations are, as I have before observed, inapplicable, and I do not see how those statutory regulations could be enlarged to render employment less liable to accidents. The only way to cause employers to keep their attention fixed upon the prevention of accidents would be to give an injured person a ready and inexpensive mode by which he could obtain compensation without being compelled to go through the cumbersome process of an action at law in a superior court. I think such a remedy could be found either by authorizing county courts or petty sessions to take cognizance of such cases, restricting the appeal to cases in which damages were awarded above 50*l.*

The number of prosecutions is still very small, as we have been met by the most ready and anxious desire in all quarters to carry out the factory regulations fairly and fully. The following is a summary of the Appendix, which contains the usual details. There was one case, however, which was rather out of the usual course. Messrs. Waite, of Otley Gill Mill, near Leeds, worsted spinners, had been systematically working overtime and during the night; a rare instance of such misconduct; but the magistrates showed how strongly they reprobated the conduct of the defendants by imposing the highest amount of penalties allowed by the Act, viz., 100*l.*

Nature of the Charges.	No. of Firms proceeded against.	No. of Cases.	No. of Convictions.	Withdrawn on Payment of Costs or entering into Sureties.	Dismissed.
Employing children, young persons, and females longer than allowed	17	74	72	2	—
Employing young persons and females on Sundays	7	7	—	7	—
Employing children without certificates of school attendance	2	10	9	1	—
Parents neglecting to cause their children to attend school	3	4	3	—	—
Employing children and young persons without registering their names	2	3	2	2	—
Employing children and young persons without surgical certificates	3	15	8	7	—
Parents allowing their children to be employed more than 6½ hours per day	2	2	2	—	—
Permitting a child to work between the fixed or traversing parts of a self-acting machine.	1	1	1	—	—
	37	117	98	19	—

The total amount of fines inflicted was 185*l.* 15*s.*

In the report of the Inspectors for the half-year ended 31st October 1856, my colleagues and I gave a resumé of

the returns of factories and of persons employed, pointing out the changes that had taken place upon comparison with former years, and the results which the returns collected in 1856 exhibited. I propose to follow much the same course of comparison with the returns collected last year, and recently published.

In dealing with the returns of 1868 a considerable allowance must be made for the state of trade. Both in the cotton and in the woollen districts a great deal of machinery has been standing, and a great many factories have been unoccupied, so that the returns do not represent the condition of the textile manufactures in a state of activity, but of comparative quiescence, and the full number of persons usually employed, and indeed the entire details of many factories, are necessarily wanting in the return.

The first inquiry will be as to the number of factories from which returns have been received; and the increase from 1838 has been as follows:

	Number of Factories from which Returns were received in			
	1838.	1850.	1856.	1868.
Cotton factories	1,819	1,932	2,210	2,549
Woollen „	1,322	1,497	1,505	1,658
Worsted „	416	501	525	703
Flax „	392	393	417	405
Silk „	268	277	460	591
Other „	—	—	—	497
	4,217	4,600	5,117	6,403

The centesimal increase since 1838 is as follows:

Cotton	40 per cent.
Woollen	20 „
Worsted	40 „
Flax	3 „
Silk	120 „
Total	50 „

The number of cotton factories in Lancashire in 1838 was nearly four fifths that of the whole country, and the proportion by the last returns has rather decreased, being about three fourths. But I believe if returns had been received from all the cotton factories in Lancashire, standing or running, that the proportion would have remained the same.

In woollen factories the principal increase has been in Lancashire and Yorkshire.

The worsted trade is still almost entirely confined to Yorkshire, the increase also since 1838 having been considerable, from 511 to 687.

There is nothing to remark upon as to the flax trade.

The observations made in 1856 upon the silk trade hold good now; there has been a considerable increase of the number of small factories employed in ribbon weaving.

From some alterations which have been made in the terms of the two last returns, a comparison of the horse power in the factories has been somewhat interfered with. The returns originally gave the nominal horse power; they now give the indicated horse power; and I am, moreover, inclined to think that the "amount of horse power used, average indica ion," is the column in the returns which is filled up with less accuracy than others. After all, the actual and precise amount of power used is not so important as the actual quantity and capacity of the machinery itself, and in these particulars I think the returns are reliable.

The returns for 1868 contain several new columns which are of considerable interest; for instance, the number of combing machines, of billy spindles, and of condensers. The combing machine is a recent adaptation of power to manipulatory processes; it was first applied to wool, combing being then a process peculiar to wool, and the introduction of the machine caused a complete change in the economy of a worsted mill; yet it was found well adapted for cotton, and has been largely used in Lancashire, and more recently still it has been applied to flax.

The following are the number of combing machines in use in

Cotton factories	-	8,541
Woollen „	-	1,144
Worsted „	-	1,038
Flax „	-	377
Silk „	-	—
		11,100

All wool formerly was slubbed by the billy, and the number of billy spindles would indicate the quantity of wool manufactured into yarn; but the introduction of the condenser has superseded the billy frame for a very large class of work. As the number of billy spindles had not been obtained in a return before 1868, no comparison can be made of the state of this process of manufacture, but the actual

numbers now ascertained will be the groundwork for future comparison.

In cotton factories - -	32,818
„ woollen „ - -	1,100,126
„ worsted „ - -	15,617
„ flax „ - -	—
„ silk „ - -	—
	1,148,561

The number of condensers are :—

In cotton factories - -	—
„ woollen „ - -	1,399
„ worsted „ - -	4
„ flax „ - -	—
„ silk „ - -	—
	1,403

The number of spindles in the different kinds of fabric returned in 1868 has greatly increased since 1856, as the following comparison shows :—

	1856.	1868.
In cotton factories -	28,010,217	32,000,014
„ woollen „ -	1,786,972	4,262,669
„ worsted „ -	1,324,549	2,193,210
„ flax „ -	1,288,043	1,679,357
„ silk „ -	1,093,799	978,168

It is more than probable that the actual increase in the number of spinning spindles is greater than the above figures would indicate, as in many cases the numbers of doubling spindles and of billy spindles were included in the returns of 1856, whereas they are now given separately.

The number of power looms in the same periods is as follows :—

	1850.	1856.	1868.
Cotton -	249,627	298,847	379,329
Woollen -	9,439	14,453	46,204
Worsted -	32,617	38,956	71,666
Flax -	3,670	7,689	31,040
Silk -	6,092	9,260	14,625
Other fabrics	—	—	3,755
	301,455	369,205	546,619

The number of power loom weavers is also given in the return for 1868, but it was not one of the details required in 1856. There were in

Cotton factories	151,783
Woollen „	34,063
Worsted „	31,548
Flax „	23,541
Silk „	6,329
Other „	1,366
	248,630

The tendency to increase the size of spinning factories, as mentioned in the reports for October 1856, still continues, as the following average number of spindles per factory wherein spinning is carried on will show :—

	1850.	1856.	1868.
Cotton	14,000	17,000	18,300
Woollen	—	—	3,000
Worsted	2,200	3,400	4,600
Flax	2,700	3,700	6,430

The number of looms to a weaver varies very much according to the nature of the fabric and of the goods manufactured. In some classes of cotton goods one weaver can mind four looms, and frequently four looms are minded by one weaver assisted by a child ; then again, in some classes of woollen and of worsted goods, each loom requires one weaver. Upon the average, however, each person would manage :—

In cotton factories	2·5 looms.
„ woollen „	1·3 „
„ worsted „	2·2 „
„ flax „	1·3 „
„ silk „	2·3 „

While there has been a tendency to increase the size of the spinning factories, the trade of manufacturing goods has been extended by the increase in the number of weaving factories ; for instance, in the cotton trade there have been opened 100 new spinning factories since 1856, but in the same time there have been 230 new weaving sheds opened. I have added the numbers in each class of fabrci, showing the variations of the same nature.

No of factories for spinning only :—

	1856.	1868.
Cotton	986	1,091
Wool	942	608
Worsted	231	304
Flax	300	198
Silk	255	196

No. of factories for weaving :—

Cotton	460	698
Wool	12	59
Worsted	123	217
Flax	57	140
Silk	129	316

No. of factories for spinning and weaving :—

Cotton	652	650
Woollen	359	787
Worsted	151	166
Flax	43	110
Silk	36	56

No. of factories not included in others of the above descriptions :—

Cotton	112	110
Wool	192	298
Worsted	20	16
Flax	17	26
Silk	40	23

I would now bring together under one view the number of persons employed since 1838 in the classes into which they are divided by the factory regulations.

NUMBER of HALF-TIMERS ATTENDING SCHOOL.

	1838.	1850.	1856.	1868.
Cotton factories	12,327	14,993	24,648	41,674
Woollen „	6,203	7,094	6,703	6,767
Worsted „	4,534	9,956	11,228	26,069
Flax „	1,767	1,581	1,806	4,672
Silk „	4,452	1,498	1,686	764
	29,283	35,122	46,071	79,946
Other „	—	—	—	1,518
	29,283	35,122	46,071	81,464

Number of Male Young Persons between 13 and 18 Years of Age.

	1838.	1850.	1856.	1868.
Cotton factories	41,046	37,059	38,941	34,324
Woollen „	11,018	11,884	11,134	13,978
Worsted „	3,758	7,695	7,116	9,641
Flax „	5,953	8,012	8,950	10,730
Silk „	4,739	4,951	6,059	3,492
	66,509	67,864	72,220	72,165
Other „	—	—	—	3,513
	66,509	67,864	72,220	75,678

Number of Females above 13 Years of Age.

	1838.	1850.	1856.	1868.
Cotton factories	141,184	183,912	211,742	220,605
Woollen „	18,833	26,810	30,579	61,338
Worsted „	20,321	46,901	51,371	71,451
Flax „	29,828	46,843	55,863	81,348
Silk „	20,806	29,027	38,271	28,387
	230,972	333,493	387,826	463,129
Other „	—	—	—	20,996
	230,972	333,493	387,826	484,125

Number of Males above 18 years of Age.

	1838.	1850.	1856.	1868.
Cotton factories	64,547	94,960	103,882	104,461
Woollen „	18,754	28,655	30,675	45,098
Worsted „	3,020	15,185	18,079	24,712
Flax „	6,009	11,998	13,643	22,179
Silk „	4,306	7,068	10,121	8,374
	96,636	157,866	176,400	204,824
Other „	—	—	—	11,772
	96,636	157,866	176,400	216,596

Total Number of Persons employed.

	1838.	1850.	1856.	1868.
Cotton factories	259,104	330,924	379,213	401,064
Woollen „	54,808	74,443	79,091	127,181
Worsted „	31,628	79,737	87,794	131,890
Flax „	43,557	68,434	80,262	118,929
Silk „	34,303	42,544	56,137	41,017
	423,400	596,082	682,497	820,081
Other „	—	—	—	37,809
	423,400	596,082	682,497	857,890

The results will be best seen by the two following tables. The first shows the centesimal proportions of the different classes of hands employed in all factories.

CENTESIMAL PROPORTION of the different CLASSES of HANDS EMPLOYED.

—	Children attending School.	Males between 13 and 18.	Females above 13.	Males above 18.
1835 -	13·3	12·5	48·8	24·4
1838 -	5·9	16·1	55·2	22·8
1850 -	6·1	11·5	55·9	26·5
1856 -	6·6	10·6	57·0	25·8
1868 -	9·5	8·8	56·4	25·3

The proportion of half-timers attending school had been greatly reduced, but it has increased during the last year. The proportion of lads has decreased, while the employment of girls and females has greatly increased.

The proportions in the different kinds of fabrics is shown in the following table of comparison between 1856 and 1868. In cotton and worsted factories the proportion of half-timers has increased. In woollen factories there has been a considerable increase in the number of girls and women employed, which increase has been caused by the great number of power looms introduced into factories.

CENTESIMAL PROPORTION of PERSONS EMPLOYED.

	Children attending School.		Males between 13 and 18.		Females above 18.		Males above 18.	
	1856.	1868.	1856.	1868.	1856.	1868.	1856.	1868.
Cotton - - -	6·4	10·4	10·3	8·6	55·9	55·0	27·4	26·0
Woollen - -	8·5	5·3	14·1	11·0	38·7	48·3	38·7	35·4
Worsted - -	12·7	19·8	8·1	7·2	58·6	54·2	20·6	18·8
Flax - -	2·3	3·9	11·1	9·0	69·6	68·3	17·0	18·8
Silk - - -	3·	1·9	10·8	8·5	68 2	69·2	18·0	20·4
Others - -	—	4·0	—	9·2	—	55·5	—	31·2

In my report for October 1867 I gave the outline of the scheme which Mr. Lakeman had sketched out for adventure schools, of which there are several in the Halifax subdivision. Mr. Lakeman found the schoolmasters very ready to fall into his views, and, indeed, glad of his support. One of the features of Mr. Lakeman's proposition was that there should be some lessons learnt at home, and the value of the

scheme is shown in this, that the schoolmasters are now better able to enforce regulations upon obstinate parents. Several of the schoolmasters state that this is the only part of the scheme which gives them any trouble, because it jars upon the habits of the parents.

Mr. Lakeman, having removed at his own request from the Halifax to the eastern counties sub-division, has given me the following report of his experience in the former sub-division. He is always indefatigable and earnest, and has now a large field of usefulness before him, which I know he will turn to good account.

I also annex after Mr. Lakeman's report copies of some of the letters he has received from schoolmasters of his old sub-division, showing their opinion of the working of his school scheme; and I am desirous of calling attention to Mr. Lakeman's report and to those letters, because they show that the gentlemen of my staff are fully alive to the opportunities which their official position gives them of extending a beneficial influence whenever they find or can make an occasion for useful exertion.

"Dear Sir, Ipswich, May 15th 1869.

"Having received your permission to present to you a report of my experience during four years and five months residence in Halifax, I beg to submit the following brief resumé of my official life for that time.

"I commenced duty on the 11th January 1865. In Halifax I found that the law was generally obeyed; a spirit of emulation pervaded the larger manufacturers, who strove to advance the interests and comfort of their workpeople, and who desired to further the improvement of the children employed by them; so that with few exceptions my duty of inspection there was a pleasurable one.

"I cannot so speak of the out-districts, where some of the manufacturers do not appreciate so fully all the factory regulations, and from whom, as may be naturally inferred, I did not receive the same amount of support.

"In Elland, Todmorden, and the valleys from Hebden Bridge, for instance, a somewhat lax observance of the details of the law has been more or less prevalent. Registers were sometimes lost, abstracts and notices defaced or torn, children and young persons at work without registration or examination, arising, I am happy to say, chiefly from an ignorance of the requirements of the Acts.

"Acting upon your advice and leaning entirely upon you for guidance and support, I have been enabled to maintain comparative order by frequent visits, and, where I deemed it desirable by inspections during meal-times, and even before six a.m., by passing over the same ground in short intervals of time, by affording instruction to those requiring it, by administering

wholesome cautions to the careless, and by persevering in one uniform system of doing my duty.

"It is satisfactory to be enabled to state that accidents arising from unfenced machinery were few, though I must record eight fatal ones, two from having been caught by upright shafts, two from falling down hoists, three from putting straps on the shaft pulleys, and one through folly.

"The lessons to be derived from those and lesser accidents were not lost sight of by me; whenever I could I suggested perfect security from accident, and any expenses incurred through my suggestions were cheerfully met.

"You were pleased to institute proceedings in 57 cases, two of which were dismissed; the total penalties and costs amounted to 500*l.* 11*s.* 6*d.*

"As the majority of those cases were taken during the two first years of my residence, and heavy penalties having been inflicted in a few, they proved a deterrent to others, so that in the last two years my prosecutions were light in comparison. Running overtime, and the employment of young hands for full time, were firmly dealt with by the bench, which checked a repetition of those offences.

"The education of factory children was a subject of interest to me; I was satisfied that something might be done for them, and that in the out-of-the-way places masters and children required some assistance and support.

"On the 20th November 1867 I therefore submitted to you a report thereon and a scheme for the conducting of adventure schools, to which you were pleased to express yourself favourable, and you also did me the honour to publish it in your report for the half-year ended October 1867, and to order copies to be struck off for my use.

"The best proof of the result of my endeavours is to be seen in the letters of the schoolmasters, which I beg to annex.

"In my subsequent visits to these schools I found an improvement. I have been materially assisted by your kind assent to the following applications for grants, which have been disposed of in some instances according to my wishes:—

	During half-years ended
"To the Ovenden Cross School, near Halifax, 10*l.*	Oct. 1865.
„ Cornholme School, near Todmorden, 10*l.*	Oct. 1866.
„ Independent School, Wheatley Halifax, 10*l.*	April 1867.
„ Mount Pellon Schools, Halifax, 10*l.*	April 1867.
„ St. Mary Ripponden Schools, near Halifax, 10*l.*	Oct. 1867.
„ Walker Lane School, near Hebden Bridge, 10*l.*	Oct. 1867.

"In July 1867 the bills then before Parliament for the Factory Acts Extension Act and for the Workshop Regulation Act were considered by the Halifax Chamber of Commerce.

"I was invited to meet a deputation from that body to discuss the terms of the bills, and a long letter which you had addressed to me, and which was subsequently published throughout Yorkshire and Lancashire, was read to the deputation; it at once removed all doubts from the minds of the Chamber as to the bills, which from that time were warmly supported by them. In January 1868 I was cordially met by the occupiers under the new law, your presence at a meeting held on the 12th December 1867 at the Town Hall, Halifax, to explain the Act of 1867 to a numerous attendance of new occupiers, having tended to make that Act accceptable to them all. The chief points of interest to them were the modifications granted by the Act; indeed, during my subsequent visits allusion was made to that meeting, and their satisfaction in the wisdom of the framers of the Act for permitting such modifications as were absolutely necessary in their trades and for the comfort of their workpeople.

"The Workshop Regulation Act then followed, and, in accordance with your views that this Act must be administered, I brought the matter before Thomas Shaw, Esq., the mayor, who, with that desire to benefit all classes of his fellow townspeople which always distinguished him, and with great courtesy to me individually, appointed an officer on the 15th October 1868. I had, however, previous thereto, put the Act into working order by visiting the principal tradesmen in Halifax and Hebden Bridge. The willingness of the occupiers under this Act to accept the regulations is a proof of the favour in which the Act is regarded by the workpeople.

"The applications, granted by order of the Secretary of State, for relaxation to some trades, and the substitution of Friday afternoons for the Saturday as a half-holiday, which was proposed by the association for promoting the early closing of shops, was hailed as a boon which acted most favourably upon all classes.

"In Halifax and Hebden Bridge there are about 100 workshops, which have been visited. 40 males and 6 females under 12 years of age are employed and attending school, and 9 under 8 years of age were found to be at work.

"The Act is now generally recognized in the borough, and from interviews I have had with the secretaries of the local boards, I hope that it will be administered in their several localities very shortly.

"Now that I have entered upon another district, it is gratifying to me to believe that Halifax is in very good order throughout.

"The Chamber of Commerce of Halifax passed a resolution most gratifying to me as a public officer.

"I also received an address signed by 47 principal teachers of National and British schools, warmly acknowledging the success

of my efforts in promoting the education of the Factory children.

"I beg to be permitted to express my conviction that the smoothness of my path and the kind notice of my services resulted from a steady adherence to your counsel, and also to the fact that I have never concealed from you the smallest information from which I believed you could derive some advantage.

"I am,
"Dear Sir,
"Yours truly,
"Alexander Redgrave, Esq." JAS. B. LAKEMAN.

From Mr. Sunderland, Lineholme School.

"I BEG to inform you how I have succeeded with the time table you furnished me.

"I have adhered to the plan as nearly as I conveniently could, and for results beg to delay till a future period.

"I feel satisfied the course recommended will ultimately be satisfactory to the parents, and hope greater results in some branches will be attained, particularly in dictation.

"The greatest impediment I have to contend against is the want of books. I invariably find the parents rather tardy in furnishing what is really necessary.

"Had I more books I should be better prepared for more uniformity in the classes, and enabled to carry out your table with more efficiency."

From Mr. Midgley, Hollins Turn.

"I HAVE adopted your copy of school scheme. I must say that your method of repeating tables has been very succesful, and appears to be satisfactory.

"The arithmetic from blackboard, Tuesdays and Thursdays, is an improvement to the classes. Your other methods appear to be similar to our former rules."

From Mr. Foxcroft, Mytholmroyd School.

"I HAVE tried 'your system' for teaching 60 factory children, and, as far as we have been able to follow it, have found it the very thing we wanted."

From Mr. Farrar, Mytholmroyd School.

"I HAVE tried your factory school scheme, and I find it to work very favourably; and I think that with a larger number of scholars the results of this scheme would be more favourable still."

From Mr. Kershaw, Kell School, Shibden.

"I HAVE faithfully carried out the principle laid down in the programme, with slight alterations to suit our usual time; and after giving the plan a fair trial, I have no hesitation in saying, if the scheme is carried out with patience, industry, and

perseverance (which qualities I trust I possess), it will considerably elevate the educational standard of the school.

"But I find my greatest difficulty in the home lessons. In some cases I am cordially supported by the parents; in these cases the results are pleasing. In others the parents are careless; the results are, the lessons not properly attended to. But my greatest obstacle is the determined opposition of some of the parents, who have threatened that if the home lessons are continued they will take their children from the factory and the school."

From Mr. Helliwell, Bank Foot School.

"In reference to your scheme, I find by acting up to it that the children are improving very much, and as long as I continue teaching factory children I shall conduct the school after your scheme to the best of my ability. I shall be glad if you will give me a call any time."

In my last report, and again in the parliamentary return,* I detailed the modifications which had been granted, under the Act of 1867. These concessions have given unmixed satisfaction to the employers and employed throughout my district, as far as the sub-inspectors and I can ascertain.

When in April 1868 my colleague and I considered for what trades it had been proved that modifications would be required, my experience was then insufficient to enable me to satisfy myself as to the customs or exigencies of the varied and numerous occupations then so recently brought under inspection. I felt how great a responsibility rested upon me to be guided by the strictest impartiality, and not to decide hastily upon refusing or recommending any modification. I concurred therefore with my colleague in limiting the expression of my opinion to the trades then agreed upon,† but almost every day brought into view customs and exigencies in special localities and in particular trades beyond those named; † and the time arrived when a more comprehensive memorandum was called for, to place the question upon a basis of principle.

The parliamentary return No. 197, to which I have referred, shows the principles by which I am guided in recommending modifications to be granted, and I believe a full consideration of them will show that the question of modifications has been dealt with in a spirit of equity and full regard to the exigencies of trade and the wishes and benefit of the employed.

* Factory Acts Extension Act (1867) Modifications, House of Commons Papers 1869, No. 197.

† Paper manufactories; trades dealing with molten metal; newspaper printing offices; shops and warehouses in which the persons are of a higher class than the factory operatives; works in which there are particular local customs, which do not affect other districts, in which there are peculiarities of manufacture.

The principles are embodied in the following memorandum, issued with your approval and laid before Parliament. This memorandum was agreed upon, after full consideration, by my colleague and myself, to be applicable generally throughout the country.

"Factory Acts Extension Act, 1867.

"The experience of the working of the Act having brought before the Inspectors customs and exigencies of trades which did not come fully under their consideration in April 1868, when it was agreed that a case had been made out for the granting of modifications to certain trades, the Inspectors have further agreed as follows :—

"That in the cases herein-after mentioned it appears that customs or exigencies also warrant the granting of modifications :—

"Modification No. 12.

"*Power to work between* 7 *to* 7 *or* 8 *to* 8.

"That in respect to works coming within the following definitions, the hours, when required, may be in some cases between 7 to 7, in others between 8 to 8 :

"Trades in London, Edinburgh, and Dublin.

"Factories in which no person is ever employed under 11 years of age.

"Factories in connexion with retail shops or dwelling houses occupied by the employer.

"Factories in which the persons employed are of a class necessarily possessing superior intelligence and education.

"Newspaper printing offices.

"Warehouses in which goods are polished, cleaned, wrapped, and packed up.

"That in respect to the following trades, the hours of work, when required, may be between 7 and 7 :

"Letterpress printing.

"Bookbinding.

"Tobacco manufacture.

"No modification is to be granted under this section in respect to any child.

"Modification No. 17.

"*Employment of male young persons during the night.*

"When required, this may be authorized until 1st July 1870, in—

"Breweries.

"Marine engineering works.

"Oil and seed crushing mills.

"MODIFICATION No. 25.

"(b.) *The eight half-holidays may be given on different days.*

"(c.) *Substitution of another day for the Saturday half-holiday.*

"When required, these modifications may be authorized in any factory.

"(f.) *Employment of male young persons of at least* 16 *years of age as male adults.*

"When required, this may be authorized until 1st July 1870. For chemical works the application must be accompanied by a medical certificate that the labour would not be prejudicial to health, in—

"Enamelling of metal.
"Metal tube making.
"Boiler making.
"Gasometer making.
"Marine engineering.
"Breweries.
"Chemical works.

"ALEXR. REDGRAVE.
"ROBT. BAKER.

"Factory Inspectors' Office,
"10, Whitehall,
"20th May 1869."

In my last report I gave an outline of the progress being made throughout my district for administering the Workshop Regulation Act, 1867, and I also stated that I was endeavouring to prepare the way for uniformity of practice among the local authorities.

As I had found some difference of opinion to exist in Scotland as to the meaning of term "local authority," you were kind enough to obtain for me the opinion of the Lord Advocate, which I communicated to the local authorities in Scotland, who have accepted and acted upon this opinion. My letter was dated 1st Feb. 1869, and is as follows:—

"Factory Inspectors' Office,
"10, Whitehall, London, S.W.,
"1st February 1869.

'SIR,

"SOME doubts having been expressed in Scotland as to the precise meaning of that part of the second schedule of the Workshop Regulation Act, 1867, which defines the local authorities to whom the administration of the Act is confided, I beg to inform you that the question has been submitted to the Lord Advocate, who has given the following opinion:—

"In burghs, whatever other authorities there may be, the magistrates and town council are the local authority.

"In places not being burghs, but where there are police commissioners or trustees, they are the local authority.

"In places being neither burghs nor governed by police commissioners or trustees, the parochial board is the local authority.

"I take this opportunity of informing you that the Act has been put into operation in a very large number of places in my district; that there has not been found any difficulty in administering any of its provisions, and it has been received in the best spirit by those whose premises have come under its provisions.

"If the subject has not yet taken a definite form within your jurisdiction, and if there be employments which come within the definition of a workshop, I beg earnestly to represent to you the importance of your not depriving the young children and women of the protection which the legislature has declared they shall have.

"I am, Sir,
"Your obedient Servant,
"Alexr. Redgrave,
"H.M. Inspector of Factories."

"A workshop is defined to be 'any room or place, whether in 'the open air or under cover, in which any manual labour is 'exercised by way of trade, or for the purposes of gain, in or 'incidental to the making any article or part of an article, or in 'or incidental to the altering, repairing, ornamenting, finishing, 'or otherwise adapting for sale, any article, by any child, young 'person, or woman.' But no place is a workshop which is a factory under any of the Factory Acts."

The medical officers of health are the officers selected by the local authorities in the metropolis to administer the Act, and in my communications with these gentlemen I have found a strong desire to act harmoniously and with uniformity, and I was requested to make suggestions upon one or two points in regard to the administration of the Act in the metropolis. I have been very anxious that there should be a systematic inspection of each metropolitan district, so that the officers of health might have a knowledge of the sort of work which the carrying out of the Act would necessitate. Dr. Hardwick, the excellent medical officer of Paddington, proposed to his colleagues that a record should be kept by them upon the same plan; and, as a comparison of the several records would at a future time be of considerable value, I suggested the adoption of the plan he recommended, which appeared to me to be simple and at the same time sufficient, and I hope in a future report to be able, by the kindness of the medical officers, to present to you the result of their investigations.

The following is a specimen of the register and of the facts recorded:—

DISTRICT (OR PARISH) OF _____

Situation of Premises. Name of Occupier. Nature of Occupation.	No. of Persons employed.					Hours of Work.	Time for Meals.	Ventilation, &c.			Date of Inspection.	State of Premises.	Remarks.
	Under 13.	13 and under 18.	Male.	Female.	Total.			Cubic Feet per Person.	Cubic Feet per Room.	Ventilation.			
38, Queen's Road. Mrs. Brown. Dressmaker.	..	4	..	4	4	10 8 to 8	2 hours.	323	2,914	Good	12 May, 1868 31 Dec., 1868	Clean	On complaint, but regular.
46, Clarence Street. Mrs. Smith. Artificial Florist.	..	6	..	6	6	10 8 to 8	2 hours.	276	1,660	Bad	12 May, 1868	Clean	Not a fit place.
16, Sheldon Street, Mr. Henry. Box Maker.	..	14	..	14	14	10½ 8 to 8	1½ hours.	84	588	Bad	16 Dec., 1868	Clean	This is badly constructed and much too small. Has promised to alter this.

One point of very great importance in the metropolis is that of space per person employed and ventilation. It is one which is to some extent difficult to deal with in a place like London, for the workshops are frequently in confined streets, and the workrooms crowded to a sad extent. I have found this in visiting, for instance, small tobacco factories. Frequently there have been places with at least twice as many at work as there ought to be at the most moderate calculation, and yet to put a stop to this suddenly and arbitrarily would cause serious hardship and loss both to the masters and to the employed. I have desired, therefore, that improvements should be introduced, insisting upon a manifest amelioration without loss of time, but not laying down a rule which should have the effect of entirely closing numerous places providing a maintenance to a very needy and impoverished class of operatives. I impressed this view upon the local authorities, and I am satisfied that we are acting in harmony upon this question. The following is a copy of the letter I addressed to the local authorities of the metropolis:—

"Factory Inspectors' Office,
"10, Whitehall, S.W.,
"1st February 1869.

"SIR,

"THERE are one or two points connected with the administration of the Workshops Regulation Act, 1867, which I am desirous of bringing to your notice.

"I would suggest that there should be in every separate jurisdiction, as there has already been in some, a systematic inspection of the several 'workshops,' and a record made of the state of things found to exist.

"I enclose a schedule which might be adopted in the metropolis for the record of the inspections. At the end of the year a *resumé* of the information contained in the schedules would give some very instructive facts respecting the minor industries of the metropolis and the social condition of a large number of workers.

"After such an inspection has been once made, and the recorded results examined, you will then be in a position to judge to what extent a periodical inspection will be desirable, and whether an occasional visitation will be sufficient.

"I am of opinion that after a thorough inspection has once been made a vast number of the masters of workshops will comply with the regulations fairly and honestly. Except in some special cases, and in some particular trades, I do not anticipate infractions of the law, and, as this Act was intended to protect children and females in those special cases and in these particular trades, it is of the greatest importance that the local authorities should make that protection effective.

"The health and well-being of the workpeople depend more than anything upon the cleanliness and proper ventilation of the rooms in which they work. This is a subject which will doubtless receive attention from your officers. At the same time they will doubtless feel it necessary to deal with the matter in a conciliatory spirit, and having full regard to the circumstances, the means, and the good feeling of the occupiers of workshops. I do not think it would be well to lay down some inflexible rules, which it might be impossible to enforce in such localities as abound in the metropolis; and I would suggest that a moderate standing point be selected, which should have a certain amount of elasticity. I would recommend, as regards cubic space, that a workroom should afford 300 feet to every person employed; but in deciding upon the sufficiency of ventilation it will also be desirable to take into account the floor space per person, the state of ventilation by windows, doors, and other means, and the proximity and condition of water-closets.

"In bringing these matters to your notice, I do so in the full persuasion that the exercise of the powers vested in you by the Workshops Regulation Act will have a most beneficial influence upon the well-being and happiness of a large population whose condition can only be ameliorated by the aid of a superintending authority.

"I am, Sir,
"Your obedient Servant,
"ALEXANDER REDGRAVE."

I have been anxious to keep the local authorities well informed of any modifications that have been granted, or of any authoritative opinions that have been given upon the construction of any parts of the Workshops Act, 1867. I felt myself responsible to a great extent upon the passing of the Workshops Act, 1867, that every effort should be made in my district for the proper administration of the Act. Very considerable progress has been made and continues to be made for this end, and I have been desirous of smoothing the way as much as possible for the local authorities, and relieving them from difficulties which might arise in the course of their proceedings to enforce the Act, I made therefore the following communication throughout my district:

"Factory Inspectors' Office,
"10, Whitehall, London, S.W.
SIR, 1st February 1869.

"THE Workshop Regulation Act, 1867, having been put into operation in very many towns and important places in my district, it has appeared to me very desirable that there should be as great an uniformity as possible in the carrying out of its provisions.

"In order to assist in this object, and to keep before the minds both of the employers and the employed the importance of regularity of hours of work and of meals, I have drawn up a form, upon the plan of the form used in factories under my inspection, a copy of which I would suggest should be hung up in every workshop.

"I shall be happy to supply you, from time to time, with such numbers of this form as you may require.

"In the administration of this Act, which was prepared so as to allow of the peculiarities of any special trade receiving the fullest consideration from the Secretary of State, cases will occur in which the Secretary of State may consider it necessary to authorize some of the modifications enumerated in the first schedule of the Act, and I shall communicate to you the particulars of all such cases, as well as any opinion he may express touching the construction of any part of the Act, in order that you may make the same public within your jurisdiction.

"On the other side, I have enumerated the modifications which have been authorized, and the opinions expressed as to the construction of some parts of the Act, up to this date.

"I am Sir,

"Your obedient Servant,

"ALEXANDER REDGRAVE,

"H.M. Inspector of Factories."

"OPINIONS of the SECRETARY of STATE, or of the ATTORNEY and SOLICITOR-GENERAL.

"*Hours of work.*—By section 6 of the Workshop Regulation Act, 1867, the actual hours of work must not exceed ten and a half on any one day, or seven and a half on Saturday.

"*Brickfields.*—Notwithstanding anything in the Acts, brickfields are under inspection.

"*Bakehouses.*—Notwithstanding anything in the Acts, the Bakehouse Act only applies to those parts of the premises where the bread, biscuits, or confectionery are made and baked; the other parts of a bakehouse are under inspection.

"*Saturday half-holiday.*—When, by order of the Secretary of State, another day has been substituted for Saturday for the weekly half-holiday, it is not necessary that all the persons employed should have their half-holiday on the same day; part may have their half-holiday on one day and part on another day.

"MODIFICATIONS granted by Order of the Secretary of State, as published in the 'London Gazette,' pursuant to the directions of the Act of Parliament.

"*Oil and seed crushing mills.*—Male young persons, of at least 16 years of age, may be employed as if they were above 18, until the 1st July 1870.

"*Any workshop in connexion with a retail shop in which any articles of wearing apparel are made, or in towns in which the*

market day is Saturday.—Another day may be substituted for Saturday for the weekly half-holiday.

"*Any workshop.*—Where in any workshop the hours of work are *bonâ fide* from 7 a.m. to 7 p.m., work may continue until 3 p.m. on Saturdays; where the hours of work are from 8 a.m. to 8 p.m., they may continue until 4 p.m. on Saturdays.

"MEM.—The Workshop Act applies to premises, however few the persons employed may be.

"The only modification is in retail establishments, where not more than five persons are employed in making articles sold by retail on the premises, or in repairing articles of a like nature; in these cases the Saturday half-holiday is not compulsory, but in every other particular the regulations are in force."

I am very sanguine that this Act will eventually be a success. I found this opinion upon the expressed willingness of employers to accept it as legislation in a wise direction, upon their readiness to observe its provisions, and upon the entire absence of quibbling or misrepresentations to escape the restrictions. Granted that in some respects it might be improved, yet in its main features, in the restriction of the labour of females and young persons, it has already entirely changed the features and aspects of some trades; and in the necessity it imposes upon children to attend school it has already in a great number of trades prevented the improper employment of infants, and is preparing the way for a general observance of school attendance A very slight pressure of the local authorities would make this Act as well observed and as popular as the Factory Act itself.

The more our inspection reaches to all the varied branches of industry the more apparent it is that overwork is no longer the rule in this country. Regular and systematic overwork I believe to have ceased entirely as regards most of the trades under the Factory Acts Extension Act, 1867, throughout my district. Occasionally we have found an excess of hours habitual, and it has been necessary in a few instances to prosecute those who persisted in evading the law. It is satisfactory, however, to know that although the persons so employed in excess of the legal hours were paid piecework, and were consequently gainers by the excess, they rejoiced when we put a stop to it. I have therefore little more to report upon this part of the question than that the Act is cordially supported by the masters, and fully appreciated by the operatives.

But turning to the other part of the question—the educational effect of the Act of 1867—the result is by no means so satisfactory; and yet we ought to have been

prepared for the result, if we had looked to what has occurred at every step in factory legislation.

Manufacturers do not employ children unless they are essential to the manufacture, or unless they are the cheapest labour that can be obtained. Hundreds of manufacturers are earnest supporters of schools, both by their influence and their contributions, but they will not employ school children,—half-timers,—in their own establishments. The Factory Act makes them responsible for employing children in one week unless they have attended school in the preceding week. They contend that the enforcement of the attendance of children at school is a duty for which parents alone ought to be made responsible. This existed most strongly at the time of the passing of the Act of 1833, and continued in full force for many years, detracting greatly from the value of the educational provisions of the Acts. The several factory returns show how marked this feeling has been.

The first return was made in 1835, and in that year there were 47,373 children under 13 years of age employed for full time.*

The next return was in 1838, when the half-time system was in operation; and if it had been fairly and fully accepted there would have been at least 94,000 half-time children attending school, instead of which there were actually no more than 24,831, and it was not until within the last few years that the number of half-timers was equal to the number of children under 13 years of age who were working full time in 1835. The objections to the employment of half-time children have, however, greatly diminished, and we find that the number now attending schools under the Acts of 1833 and 1844 have risen to 81,474, a number which I trust will still increase.

It has been the earnest object of my staff in the administration of the several Acts to urge the employment of half-timers as the great step remaining to produce the full and complete success of the Ten Hours Bill, as a means for securing to manufacturers a supply of disciplined and trained work-people, as furthering the social and moral improvement of the individual, and as extending the influence of education over the many.

We have endeavoured to administer the educational regulations of the Act by enlisting the co-operation of employers and managers of mills, by aiding them in insist-

* Reports of Inspectors of Factories for the half-year ended 31st October 1856.

ing upon the regularity of attendance of the children at school, by making parents understand their exact position as responsible for the attendance of their children at school, and by organizing, with the assistance of the schoolmasters, who have always been most anxious to co-operate with us, a system whereby non-attendance at school is notified imme- to the manager of the mill, and the neglect is at once known and inquired into.* .

---

* The principle acted upon in my district is thus described in my "Hints "upon the Administration of the Factory Acts," a copy of which is sent gratuitously to every manufacturer : —

"School Attendance and Certificates.

"The parent is required to cause his child to attend school for three hours daily for five days in the week.

"The occupier is required to ascertain on each Monday morning that each child has attended school for three hours daily for five days in the preceding week.

"The school certificate book is to be kept at the works from Monday until Friday. On Friday afternoon it should be sent to the schoolmaster to be filled up by him for the week just ended; it should then be returned to the works, and be examined by the Monday morning, in order to ascertain whether all the children then employed in the works had attended the school as required by law.

"Thus it will be seen that the parent is made responsible for the attendance of his child at school day by day, and the occupier is not made responsible until after the expiration of the week, when he has had the opportunity of ascertaining whether the requirements of the law have been fulfilled in regard to each child employed ; and he is not even then liable to complaint, unless he continue to employ children whose school attendance has been deficient. For instance, if a child without the knowledge of the occupier neglect his school attendance, either wholly or partly, from the Monday to the Friday, the occupier is responsible in no way whatever for that neglect unless he employ the child in the following week, for then he will not have procured by the Monday morning a certificate of the child's attendance at school for five days in the preceding week. Primâ facie, there would be no difficulty in a strict observance of the regulation, that if a child does not attend school regularly it cannot be legally employed for the week following the neglected school attendance. The occupier having ascertained by his manager or clerk from the school certificate book that the attendance of a child had been irregular during the week, has only to dispense with the labour of the child for that week, and to require attendance at school for the week, and he would be absolved from responsibility; but the loss of a week's work of a few children is frequently a serious hindrance to some portion of the operations in the works, and is a heavy penalty for an occupier to pay for a neglect of which he may and generally does know nothing until after it has taken place, and which he cannot remedy after discovery without detriment to himself. With a view, therefore, to relieve the occupier from this dilemma, without relaxing the very necessary requirements of the law as to school attendance, the following remedy, which visits the real offender, viz., the parent, with immediate punishment, and which does not deprive the occupier of the labour of the half-timer for a whole week, is strongly recommended. The plan is merely an arrangement made with the schoolmaster that he should, whenever a child does not appear in school at the appointed hour, send on the same day the name of the child to the manager or overlooker. If the child ought to have attended school in the morning, by sending the name to the manager he is enabled at once to prevent the child working in the mill that afternoon, and to require the child to go to school instead ; the child will thus make up the proper number of school attendances during the

I believe this system, which has now been pursued for some years, has not been without some result in increasing the number of half-timers in factories.

The whole number of such children employed in the textile factories of the United Kingdom in 1838 was, as has been seen, 24,831. About the same number are now attending school in those parts of Lancashire which are in my district, and 9,000 more than that number are now attending school in factories in Yorkshire, also in my district. The number now attending school in the textile factories under the Acts of 1833 and 1844 in the United Kingdom is 81,464, of which number nearly four fifths, or 64,869, are employed in the factories in my district.

It is clear from this that objections fairly met and dealt with can be overcome, and I have no doubt that when the Act of 1867 has become more familiar to the manufacturers we shall find fewer objections to the employment of half-time children; but it is well now to consider what the Act of 1867 has done in this respect, as a guide to us in connexion with that great subject, which in effect it has left untouched, the education of the people.

---

week, the parent will forfeit the *day's* wages, an immediate penalty of a moderate amount, and the occupier will lose only one day's labour instead of five. If the child miss school in the afternoon, the same process is gone through, the manager forbidding the child to work the next morning, and requiring it to attend school instead. This is not a new arrangement; it has been in operation in many factories for years, and whenever this plan has been adopted it has succeeded in lessening the absences from school; and although it requires prompt attention at first, yet the punishment follows so rapidly after the discovery of the neglect, that in a surprisingly short space of time children who have been truants, careless, irregular in the hours of their attendance, and who have been in the habit of performing domestic duties at home instead of attending school, are transformed into regular and attentive frequenters of school, without the institution of legal proceedings against occupiers, who are less to blame in the matter than the parents, over whom they have no control, or against parents who err from their inability to appreciate the humane intentions of the Legislature. It appears at first to be a troublesome arrangement, but when it has been firmly carried out, and the children know that non-attendance at school will not be overlooked, and that they will certainly lose a day's wages, they give comparatively little trouble, and attend school as regularly as could be wished; in fact, the attendance of half-timers in many schools is punctual and constant, being frequently better than the attendance of the other scholars, who are not under the restrictions of the Factory Acts. If some such arrangements as the above be not adopted (and schoolmasters are ready to adopt any plan which shall assist in procuring regularity of attendance, and to fall into any proposition having for its object the promotion of the efficiency of their school), the successful working of the school clauses of the Acts will cause some trouble; but no insuperable difficulty does exist to the satisfactory fulfilment of the school clauses, and in whatever manner an occupier endeavours to carry out the half-time system, he may depend upon the co-operation of the inspector and sub-inspectors in assisting him to overcome any obstruction which he may experience in his laudable and excellent efforts to introduce that system.

The question which I have frequently been asked, as to what is the result educationally of the Factory Acts Extension Act, 1867, is here answered. In the whole of my district, including the south-eastern, metropolitan, eastern, north-eastern counties, with Yorkshire, fully one half of Lancashire and the whole of Scotland, there have been only 733 half-timers attending school.

In no one trade are there as many as 100 children attending school.

The result of the Act of 1867 has therefore been to replace the younger by older children, and I am not prepared to say that this result is to be deplored in all its features.

In a great number of occupations it is certainly most objectionable that young children should be employed at all, and in this the Act has operated most beneficially; but in others, in which the labour is suitable for young children, I regret to have found so few employed. As the sub-inspectors however continue their visits they will aid in arranging for the employment of half-timers. For instance, Mr. Oram, who has now the supervision of the east end of the metropolis, reported to me that although the tobacco manufacturers there had at first discharged all the children under 12, he thought he should be able to induce the masters, who as well as the persons employed are chiefly of the Jewish persuasion, to commence the half-time system, and he proceeded to bring the matter before the managers of the Jewish free schools in that neighbourhood. As a result of his interposition, some of these manufacturers are already beginning to take on half-timers.

I now beg to call your attention to the occupations in my district in which half-timers are employed under the Act of 1867, and the numbers employed in each.

Steelworks	97
Machine works	87
Bobbin turners	68
Tobacco and cigar factories	66
Wire drawing	54
Lace warehouses	51
Letter-press printers	44
Rope walks	36
Paper factories	35
Iron foundries	28
Handloom weaving	26
Clog makers	16
Packing case makers	14

Paper tube makers	14
Brickmakers	14
Spindle makers	14
Cutlery	12
Shuttle makers	12
Heald knitting	10
Blast furnaces	5
Bookbinders	5
Paper box makers	5
Brass founders	4
Saw mills	4
Lithographic printer	3
Cooperage	2
Brush makers	2
Hat makers	2
Wood turners	2
Warehouse	1
	733

It is a great satisfaction that so few half-timers are employed in the heavier metal trades, in places where those employed have to endure great heat, with exposure; and I doubt whether under any circumstances there will ever be many half-timers in future in such occupations as blast furnaces, iron mills, foundries, &c.; but with respect to most of the trades named the employment of children would be unobjectionable. Although the first-named occupation would lead one to suppose that children were employed to some extent in "steelworks," the actual fact is that of the 97 children 96 are employed in one steelwork, but the part of the work in which they are engaged is in the preparation of steel frames for umbrellas, a light and suitable occupation. I would further observe that the number of half-timers employed by brickmakers is by no means a criterion of the real number in such an occupation. Brick-making only commences in the latter end of April, and I am not able to give any estimate of the number that may be now employed; but after several communications with the association of brickmakers in the neighbourhood of the metropolis, and their solicitor Mr. Pearpoint, arrangements have been determined upon to ensure the proper observance of the educational regulations of this Act. As brickfields are frequently far from towns or even villages, this is a matter not settled quite so promptly as it would be in Blackburn, Halifax, or Bradford, but the readiness shown by the

masters to give effect to these regulations, has relieved me of a very anxiously anticipated difficulty ; and it is right to mention that the action of the association is not confined to the larger brickfields over which the inspectors have immediate superintendence, but reaches the small fields also, which are under the local authorities.

The following table is one of considerable interest; it shows the number of half-timers at present attending school under each Factory Act from 1833 to the present time, in my district.

Counties.	Factory Acts of 1833 and 1844.	Print Works Act, 1845.	Bleach and Dye Works Act, 1860.	Lace Factories Act, 1861.	Factory Act, 1864.	Factory Act, 1867.	Total.
Chester	1,500	86	—	—	—	—	1,586
Derby	1,784	349	99	11	12	5	2,260
Durham	1	—	—	—	—	—	1
Lancaster	24,542	1,321	115	—	267	193	26,438
Lincoln	3	—	—	—	3	28	34
Middlesex	10	—	—	—	—	46	56
Norfolk	50	—	—	—	—	—	50
Northumberland	1	—	—	—	27	1	29
Nottingham	474	—	120	181	66	68	909
Suffolk	41	—	—	—	—	—	41
Surrey	—	—	—	—	—	14	14
Sussex	—	—	—	—	—	1	1
York	33,948	57	38	—	63	352	34,458
Total of counties in England	62,354	1,813	372	192	438	708	65,877
Aberdeen	13	—	—	—	—	—	13
Argyll	—	6	—	—	—	2	8
Ayr	119	—	—	—	—	—	119
Banff	1	—	—	—	—	—	1
Dumbarton	—	196	—	—	—	—	196
Dumfries	2	—	—	—	—	—	2
Elgin	2	—	—	—	—	—	2
Fife	245	—	—	—	17	19	281
Forfar	1,500	—	—	—	—	—	1,500
Kincardine	2	—	—	—	—	—	2
Lanark	338	112	—	—	63	4	517
Peebles	8	—	—	—	—	—	8
Perth	182	—	—	—	—	—	182
Renfrew	84	90	—	—	—	—	174
Selkirk	13	—	—	—	—	—	13
Stirling	6	—	—	—	—	—	6
Total in Scotland	2,515	404	—	—	80	25	3,024
Total in Mr. Redgrave's District	64,869	2,217	372	192	518	733	68,901

I think these figures show conclusively that the present half-time system cannot be allowed to remain as it is. In all occupations, except the textile manufactures, under the Acts of 1833 and 1844 there is no half time system, for comparatively no children are employed at all. It is a state of things which the Legislature did not intend, and which cannot continue unredressed.

Every day's experience shows us the altered state of feeling throughout the country upon the subject of the restriction of the hours of labour. The figures to which I have referred of the number of children now attending school in my district under the Acts of 1833 and 1844 show the great change that has occurred in men's minds upon the subject of compulsory education, and I believe a very great number of persons are now prepared for a further advance, for a greater extension of the half-time system, to adapt it to the wants of the whole country, as the original system was adapted to the condition of the particular trades then dealt with.

The Legislature upwards of thirty years ago fixed the age at which children might work for full time at thirteen. This age was determined upon notwithstanding the fears of the manufacturers that it would deprive them of labour and seriously affect their manufacturing operations.

The Acts, however, of 1860, of 1861, of 1864, and of 1867 have proved abundantly that the restriction of the age had no such effect, for it is clear from the preceding table that there has been an ample supply of children above the age of thirteen.

By the employment of those young persons above the age of thirteen there is an abundance of children under that age waiting for employment, and our observation satisfies us that a very large proportion of these children do not attend school because they are waiting until they can find employment.

It appears therefore that there must be an inducement created for these children to attend school.

Considering the subject simply in connexion with the factory system, *i.e.*, education as a condition of employment, I consider that the time has arrived when two material alterations may be made in the existing conditions without interfering with the full supply of labour to the manufacturer, or placing upon parents any undue restrictions upon the employment of their children.

First, that the age at which young persons may be employed for full time be raised by one year, *i.e.*, that children should work half time and attend school until they are 14 years of age instead of 13 as at present.

Second, that no young person under the age of 16 should be employed for full time unless a certificate be produced, given upon a prescribed form, by a certificated schoolmaster, minister, inspector of schools, or justice of the peace, certifying that the young person can read and write well and work sums in the four first rules of simple arithmetic.

Two objections may be made to the above suggestions. One, that they would deprive a certain number of children of full-time employment. To this it may be replied that no fresh restriction is ever imposed without ample time being given for preparation, and that children failing to produce a certificate would fail from some cause which might have been removed; that even though some members of a family might not be able to produce a certificate, the younger members would supply their place by working half time; that the results of all the Factory Acts prove that the supply of juvenile labour has hardly been touched, and, as we know that children little above infancy were employed in all these occupations, there is no objection to children of a riper age being employed as half-timers in the same kinds of employment, and thus the supply of labour would be full and free.

Another objection may be that the amount of knowledge required is too low for young persons of fourteen, viz., the ability to read, write, and work simple sums in arithmetic.

To this I have to reply that in most places to which the half-time system has not yet extended there is a most lamentable state of ignorance, and that too high a standard would be in fact a denial of employment to a very great number of persons.

In the very interesting report of Mr. Walker for the half-year ended 31st October 1868 he showed from returns he had collected the great difference found in different parts of his district in the educational condition of the working population; for instance, in Blackburn, where the working population is almost entirely engaged in the cotton manufacture, only 24 per cent. of children presented for employment in factories could neither read nor write. In Rochdale, a somewhat similar town, the like percentage. In Leeds, engaged largely in the woollen and flax trades, 29 per cent.; while in Newcastle-upon-Tyne the percentage of ignorance was 54.

As a further illustration of this point, I beg to add other statements of the percentage of ignorance found now in existence.

Two certifying surgeons have tested for the last two years the condition of the children and young persons presented to them for certificates of age at the various works in their districts.

Mr. Grant's district comprises Poplar, Millwall, Blackwall, the Isle of Dogs, and North Woolwich.

Mr. Mitchell's district comprises part of Southwark, Lambeth, Kennington, Clapham.

Occupations.	Percentage of persons unable to read or write.	
	In Mr. Grant's District,—Millwall, Poplar, and Blackwall.	In Mr. Mitchell's District,—Lambeth and part of Southwark.
Glass factories		77
Floorcloth printers		57
Potteries		60
Iron foundries		44
Brass founders		29
Printers		26
Bookbinders		33
Engineers	28	27
India-rubber works	35	10
Iron shipbuilding	31	
Shipbuilding	41	
Ropemakers	52	
Sugar refining	41	
Rice mill	42	
Night lights	30	
Manure works	73	

Nearly all the persons whose condition is shown by this return were young persons between 12 and 16 years of age, in fact persons of an age in their station in life when education is supposed to have been finished. There is an average of 41 per cent. of complete ignorance; there are particular occupations where that percentage is nearly doubled. Mr. Mitchell says, referring to one particular class of employment, glass making, and the extreme ignorance and consequent demoralization of the employed, "The "work is done continuously by night as well as by day, by "relays of men and youths, it being necessary to keep up the "fires in the furnaces to maintain a perpetuation of the "molten state of the metal. The employment also is "extremely obnoxious to comfort and health, from the "continuous extreme heat to which the workers are exposed, "and for which nothing but the early initiation of childhood "seems able to prepare the future man, who generally is "fitted for no other labour."

This description, with slight variations, would be as applicable to many other occupations. "Nothing but the early "initiation of childhood seems able to prepare the future "man for a labour obnoxious to comfort and health."

The rude necessities of life have forced this apprenticeship; it remains for the voice of the country to insist upon that other higher apprenticeship, which leads the way to a life of sobriety, religious principle, and happiness.

I have, &c.,

ALEXANDER REDGRAVE.

Appendix No. 1.

HALF-YEARLY REPORT of DANIEL WALKER, Esq., Assistant Inspector of Factories, for the Half-year ended 30th April 1869.

Broughty Ferry,
6th June 1869.

SIR,

I HAVE the honour to inform you that, during the last six months, I have been occupied in the discharge of my official duties.

In visiting the several sub-divisions, I was sorry to find that all the staple trades of the country were more or less depressed. In many of the factories, machinery was either standing or only running short time, thus causing numbers of persons to be altogether idle or only partially employed.

Generally speaking, the law has been carefully attended to in its most important provisions. As usual, there have been a few exceptions, rendering it advisable to have recourse to legal proceedings; but these cases were neither numerous nor important. All the persons proceeded against were found liable in penalties and expenses, with one exception. In this case the charge was for employing two women in picking wool eleven instead of ten hours and a half a day. The millowner attended and admitted the offence. He stated in excuse that, although the women were employed in a room forming a part of his factory, it did not contain any machinery driven by steam or water power, and he considered, therefore, that he was not committing any breach of the law. It seems strange that after the lapse of so many years any millowner could offer such an excuse or that it should have weight with a bench of magistrates; but it had the desired effect, as the justices refused to impose a penalty. They held that payment of the costs would be a sufficient punishment, considering the nature of the offence.

I think it right to call your attention to the fact that complaints have been made to me that some of the certifying surgeons refuse to grant certificates of age till they have been furnished with an official copy of the register of birth or baptism. In Scotland this document, when obtained from the registrar of the parish or district, costs 3*s.* 6*d.* a large sum to be paid by a poor man before he can obtain employment for his child in a factory or other public work under inspection. In England an extract from the register of births, if required for the purposes of the Factory Act, can be obtained, under 7 & 8 Vict. c. 15., s. 15., by order of the

Registrar General, for 1s.; and it would seem to be only fair and reasonable that the Registrar General for Scotland should be instructed to issue these extracts upon the same terms. With this view I would respectfully suggest that steps should be taken for extending all the privileges of the above section of the Act to Scotland as well as England.*

There is another part of the duties of the certifying surgeon which I think might be very much modified. I allude to the system of reporting accidents. When the Factory Act came into operation, and machinery was not so well guarded as it ought to have been, or is at present, there existed a necessity for carefully reporting accidents, in order that the attention of millowners and others might be directed to the machinery causing these accidents, with the view to its being securely fenced. Since that time, however, a great many precautions have been adopted for rendering the machinery in factories comparatively safe; as much so, in most instances, as the nature of it will admit, and hence the same necessity for reporting accidents does not now exist. To show the needless extent to which this practice is sometimes carried, I subjoin the copy of a notice which was lately sent to a sub-inspector in this district. I omit the names of persons and places.

"———, 2nd April 1869.

"Name, age, and occupation of the person injured - -	———
"Date of accident - -	———
"Nature of accident -	Lacerated wound of nose.
"Residence - - -	———
"Cause of accident, and how the person was employed at the time - - - -	While carrying a plank he tripped and fell, striking his nose against an iron framing platform.

"———, M.D., Certifying Surgeon."

Here is another notice of the same character:—

"———, June 3rd, 1869.

"Nature of accident -	Lacerated and contused wound of face.
"Cause of accident, &c. -	When amusing himself during the dinner hour he fell from a swing.

"———, M.D., Certifying Surgeon."

* Since the above was written, Mr. Pitt Dundas, the Registrar General in Edinburgh has kindly made arrangements for carrying out the system in Scotland.—A.R.

The following is the procedure consequent on these trifling accidents:—

1st. Notice in writing to the certifying surgeon.
2nd. Copy of this notice to the sub-inspector.
3rd. Personal investigation at the factory, and also at the residence of the person hurt, by the certifying surgeon.
4th. Report in detail by the surgeon to the inspector of the district.
5th. Record of the fee for accident in the books of the Department, payment of the certifying surgeon, &c.
6th. Entry in the half-yearly Report of the inspectors to the Secretary of State.

It only remains to be added that, while this system of reporting accidents is confessedly carried too far, and might, without any detriment to the public service or to individuals, be very much modified, it costs the country at least 3,000*l.* a year.

I beg further to bring under your notice that, in the course of the last six months, I have visited, with one or two exceptions, all the flax mills in this district in England in which there is wet spinning, for the purpose of taking measures to enforce the 19th section of the Factory Act of 1844, requiring that sufficient means should be employed for protecting the workers from being wetted, and, where hot water is used, for preventing the escape of steam into the rooms occupied by the workers. In some few instances I found that these precautions had been very much neglected, the clothes of the workers, principally young girls and women, being completely saturated with wet caused by the condensed steam, and spray thrown off by the revolving spindles. Some of the floors were also flooded, and in one instance the thermometer was standing at 83°. It is, however, only right to mention that, on pointing out these defects, I received a ready assurance from all the mill-owners or other responsible persons that proper means would be at once taken to comply with the above provision of the statute.

When at Leeds, Mr. Rickards directed my attention to a mill in the neighbourhood, Messrs. Brown Brothers at Gildersome, who take peculiar pains to introduce improvements in ventilation into their works, which I visited, and was glad to find that they deserved all that Mr. Rickards had stated in their praise. There were covers on the troughs of hot water, to prevent, as much as possible, the escape of steam; and aprons or splash boards had been placed in front of the spinning frames to intercept and carry off the spray

from the spindles. They had also introduced into their wet spinning room an admirable contrivance, consisting of a fan, &c. for carrying off the steam and hot air, which it accomplished so effectually that, while the thermometer in the work to which I have referred stood on the same day at 83°, the temperature in Messrs. Brown's mill was evidently very little above 60°.

As none of the partners were at the works upon the occasion of this visit, and being desirous that the workers in other flax wet spinning mills might enjoy the same advantages as those at Gildersome, I, immediately on my return to Leeds, wrote to Messrs. Brown Brothers, expressing the great satisfaction I had derived from visiting their works, and requesting their permission to bring under the notice of seme of their brother millowners the improvements above alluded to. To this letter I received the following reply:—

"Gildersome, near Leeds,

"DEAR SIR, May 5th, 1869.

"HAVING been absent yesterday, we have only to-day received your very gratifying letter of the 3rd inst., and we are most happy to learn that you appreciate our endeavours to rid our workrooms of dust and steam, and thus to promote the health and comfort of our workpeople.

"We have never made a secret of the fan, but, on the contrary, have wished for its general introduction into all mills where they have to contend with dust and steam; and we have named it frequently in conversation with spinners of our acquaintance. Messrs. Hives and Tennant, and Messrs. Tetley, Tathams, and Walker have, we believe, one at work; and we shall, at all times, be most happy to afford every facility to anybody who you may recommend to call here for the purpose of witnessing the action of our fans.

"We consider that 'in a pecuniary sense' they amply repay for their adoption, because the workpeople are more regular in their attendance, in consequence of being in the enjoyment of better health, which also, of course, enables them to do their work better. In the spinning rooms the driving belts *last longer* (and drive better) than they do in mills where they constantly become saturated by day with condensed steam, which relaxes them; then they dry at night, which contracts them; and this alternate relaxing and contracting tends greatly to their destruction.

"In those departments of a mill where dusty operations are carried on, the removal of the dust makes it easier to keep the machinery clean, and thus saves labour in cleaning; then the oil does not clog, and thus the machines drive better and with less power; and, of course, clean machines make better work than dirty ones. It is therefore evident that it must 'pay' the

master spinner to incur the very small expenditure needed to fit up the fans.

"We remain, dear Sir,

"Daniel Walker, Esq., "Yours most respectfully,
"7, Moorland Road, (Signed) BROWN BROTHERS.
"Leeds."

Availing myself of the permission thus courteously accorded by the Messrs. Brown, I have directed the attention of other millowners to these improvements, and some of them are ready to follow Messrs. Brown's excellent example.

Since writing the above I have received the following letter from Messrs. Brown Brothers, explaining more fully their plan for rendering the atmosphere of their wet spinning room more healthy :—

"Gildersome, near Leeds.

"DEAR SIR, June 7, 1869.

"WE beg to confirm our last letter of 26th May, and have now the pleasure to address you for the purpose of fully explaining our system of ventilating our (hot water) spinning room.

"When, in our younger days, we were learning our business, we were taught to believe that it was impossible to make the frames spin well unless the room was warmed up to a high temperature, and we have no doubt that many spinners would still, at the present day affirm this to be absolutely necessary.

"Experience, however, taught us that what was really necessary was to have a dry atmosphere (dry air) within the room ; and we found we could spin perfectly well with a temperature of 60 degrees whenever the state of the weather was such as to enable us to obtain dry air within the room without exceeding that temperature. Thus our system is based upon securing a dry atmosphere at the lowest temperature we can get it, provided we do not go below about 60 degrees. We do not think it desirable to allow the temperature to fall below 60 degrees, because we find that heat to be agreeable to our workpeople and wholesome. It is also needful that the lubricating oils should be kept fluid, the driving belts flexible, &c., &c.

"*A dry atmosphere*, however, we *must* have, because, *although we always keep our hot water troughs in the very best possible state of repair, so as to reduce the steam escaping from them to a minimum quantity*, yet still we find it to be practically impossible to prevent steam escaping more or less from them, particularly when spinning hemp or very strong flax, which requires the water in the troughs to be kept very hot, and therefore a dry atmosphere within the room is absolutely needful to *imbibe or absorb the escaping steam.*

"During damp, wet, foggy weather the air is surcharged with moisture, and therefore cannot absorb steam, consequently it must be dried, either before or when it is admitted into the spinning room. We have fixed steam pipes (of 4 inches diameter) all round our room, close to the windows, and the entering air is admitted

through plates of perforated sheet iron fixed (instead of a square of glass) into the top of each window. These we sometimes cover, some or all of them, with a board in case of need; say, in very cold weather.

"Having thus secured a supply of dry air, even in damp weather, it is evident that, if it were allowed to remain too long unchanged within the room, it would again become surcharged with moisture from the steam it had absorbed, were it not for the action of the fan, which here comes so efficiently into use by drawing a gentle current of air (loaded with the absorbed steam) away from the room; and in consequence of the great elasticity of the air, it suffices to establish but a very gentle current indeed to free a large room. It is singular to witness, as we frequently do in damp heavy weather, a perfect cloud of steam outside the fan when everything is bright and clear inside the room. The smallness of the current needed to free the room renders it comparatively inexpensive to dry the incoming air, and it is very rare indeed, even in the worst of weather, that we find it needful to raise the temperature of the room higher than 70 degrees, for the purpose of securing sufficiently dry air.

"We always keep a couple of thermometers hung up in the spinning room for the sake of obtaining information, making observations, &c. &c., but in fact we do not regulate our ventilation by thermometer. It would be impossible to do so, because the quantity of moisture in the air is constantly changing, so is the quantity of steam escaping from the troughs; therefore all we do is simply to look about us, and if we find that the escaping steam is not perfectly absorbed, we slightly raise the temperature of the room by admitting a little more steam into our warming pipes. This is the whole of our plan. It is very simple and inexpensive, yet perfectly efficient, and will no doubt greatly promote the health and comfort of the workpeople, as well as increase, in many ways, as mentioned in our first letter, the profits of the millowners."

"We remain, dear Sir,

"Daniel Walker, Esq., "Yours most respectfully,

"Broughty Ferry, near Dundee." "Brown Brothers."

I feel that I ought not to close this letter without expressing the obligation I owe to Messrs. Brown Brothers for enabling me to bring under your notice the details of their plan.

I may mention, as showing the immense value of due attention being paid to the proper ventilation of wet spinning mills, that at the meeting of the British Association about two years ago I took a physician of considerable standing in London through the wet spinning department of the largest flax factory in Dundee, in which much pains have been taken to clear the atmosphere of steam, &c. Some short time ago this gentleman told me that he had since gone through a similar work in another part of the

United Kingdom, where adequate means had not been adopted, and that the contrast between the two works was most striking. In the former he saw nothing to disapprove of; in the latter the heat was oppressive. The rooms were filled with steam, the floors flooded with water, and the clothes of the workers quite wet; and he added that, in his opinion as a medical man, it was impossible that persons could be employed under such circumstances without risking eventually serious injury to health.

While, therefore, I am no advocate for prosecutions, but, on the contrary, have always disapproved of them, except when the law has been disregarded in some essential particular like the present, I would strongly recommend that, if any millowner or any class of millowners should refuse or continue to neglect to adopt the above or similar improvements so necessary for the welfare of their work-people, proceedings should be taken to enforce compliance with the very simple enactments of the 7th and 8th Vict. c. 15. s. 19.

I have the honour to be,
Sir,
Your very obedient servant,
DANIEL WALKER.

Alexander Redgrave, Esq.

Appendix No. 2.

Return of Informations laid under the Factories Regulation Acts, &c., in the District of Alexander Redgrave, Esq., for the Half-year ended 30th April 1869.

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	Remarks.
1869.			*In the Sub-Inspectorship of Mr. Patrick.*	£ s. d.	£ s. d.	
Mar. 23	James Walker, Spodden New Mill, Rochdale.	James Chadwick, R. T. Heap, T. Tweedale, Clement Royd, and J. Booth, Esqs.	Employing two women after 6 o'clock in the evening.	- -	0 14 0	The women were proved to have been working at 6.30 p.m., but the magistrates declined to convict in a greater sum than the costs.
			In the Sub-Inspectorship of Mr. Coles.			
1868. Dec. 23	Joseph Fletcher, operative, Salford	H. L. Trafford, Esq., Stipendiary Magistrate, Borough Court, Salford.	Neglecting to cause his son, a child under the age of 13 years, to attend school whilst employed in a cotton factory.	0 10 0	0 16 0	In this case the boy, at the instigation of his parents, in order to induce the certifying surgeon to "pass" him for full time, produced a certificate of birth belonging to an elder brother, deceased. On account of the poverty of the defendant the Secretary of State has since remitted the fine.

RETURN OF INFORMATIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1869.			*In the Sub-Inspectorship of Mr. Coles*—cont.	£ s. d.	£ s. d.	
Feb. 11	Clough and Whittaker, woollen manufacturers, Foundry Street, Bury, Lancashire.	R. N. Phillips, Esq., M.P., and O. O. Walker, Esq., Court House, Bury, Lancashire.	Employing five women after the hour of 6 o'clock in the evening.	3 0 0	2 13 6	Two cases withdrawn on payment of costs.
			In the Sub-Inspectorship of Mr. Rickards.			
Jan. 15	John Waite, Otley Gill -	A. Fawkes, Timothy Horsfall, W. Fison, and C. H. Dawson, Esqs., at the Court House, Otley.	Employing one young person after 6 p.m., December 8, 1868.			The magistrates were unanimous in their decision, and stated that they had never known so gross a violation of the law, defendant having been fined a year ago for working young persons after 6 p.m.
,,	,, ,,	,, ,,	Employing five young persons after 6 p.m., December 9, 1868.	100 0 0	8 0 0	
,,	,, ,,	,, ,,	Employing nine young persons until midnight, November 27.			
,,	,, ,,	,, ,,	Employing eight young persons from midnight until 9.30 a.m., November 28, 1868.			
Jan. 22	James Sharp, Morley -	Wm. Ackroyd, Esq., and Sir Chas. H. Firth, at the Court House, Dewsbury.	Employing a child more than 6½ hours - -	1 0 0		
,,	,, ,,	,, ,,	Employing a child without a school certificate -	- -	- -	Withdrawn on payment of costs.
,,	,, ,,	,, ,,	Employing a child more than 7 days without a surgical certificate.	2 0 0		

RETURN OF INFORMATIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1869.			*In the Sub-Inspectorship of Mr. Rickards*—cont.	£ s. d	£ s. d.	
Jan. 22	James Sharpe, Morley -	Wm. Ackroyd, Esq., and Sir Chas. H. Firth, at the Court House, Dewsbury.	Employing a child without having registered the name.	- -	1 9 6	Withdrawn on payment of costs.
			In the Sub-Inspectorship of Mr. Oram.			
Feb. 15	Ralph Mayers, 86, Chamber Street, tobacco manufacturer.	Ralph Augustus Benson, Esq., Thames Police Court, Stepney.	For employing young persons on Sunday the 24th January 1869.	- -	0 2 0	It had always been the custom for those manufacturers of tobacco who are of the Jewish persuasion to work on Sundays; and these cases, being brought as a warning to the trade generally, were withdrawn on payment of costs.
"	Rachel Levy and Sons, 127, Leman Street, tobacco manufacturers.	" "	For employing young persons on Sunday the 24th January 1869.	- -	0 2 0	
"	Leon Corper and Son, 1, Magdalen Place, tobacco manufacturers.	" "	For employing young persons on Sunday the 24th January 1869.	- -	0 2 0	
"	Hyman and Van Flyneen, 8, Cable Street, tobacco manufacturers.	" "	For employing young persons on Sunday the 24th January 1869.	- -	0 2 0	
"	Andrew Mayers, 5, Wellclose Square, tobacco manufacturer.	" "	For employing young persons on Sunday the 24th January 1869.	- -	0 2 0	
"	Mark Manns, 63, Church Lane, tobacco manufacturer.	" "	For employing young persons on Sunday the 24th January 1869.	- -	0 2 0	
"	Morris de Haas, 222, Whitechapel Road, tobacco manufacturer.	" "	For employing young persons on Sunday the 24th January 1869.	- -	0 2 0	

RETURN OF INFORMATIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1869.			*In the Sub-Inspectorship of Mr. Henderson.*	£ s. d.	£ s. d.	
Feb. 15	Messrs. Godwin and Smith, paper stainers, Chelsea.	— Arnold Esq.. Westminster Police Court.	Employing a young person without a surgical certificate, and without having his name registered.	- -	- -	The offences were held to be proved by the magistrate, who bound the defendants in their own recognizances.
April 14	Mr. George Strahan, bookbinder, Holborn.	— Vaughan, Esq., Bow Street Police Court.	Employing two females during the night - -	6 0 0	0 8 0	
1868.			*In the Sub-Inspectorship of Mr. Lakeman.*			
Nov. 5	Messrs. Sutcliffe, Harley House, Todmorden, cotton spinners.	Captain Sutcliffe, Rev. T. Sutcliffe, John Fielden, and Abraham Ormerod, Esqs., Todmorden Petty Sessions.	Having employed a child— Five weeks without registration - - Without a surgical certificate - - - Without a school certificate - - - And for having employed her before noon and after 1 o'clock on the same day.	 2 0 0 2 0 0 2 0 0 1 0 0	 0 10 6 0 10 6 0 10 6 0 10 6	
„ 13	Hanson William, Commercial Mills, Halifax, cotton spinner.	Captain Rothwell and Selby Walsh, Esq., Halifax Borough Court.	Having employed a child— Six weeks without registration - - And without a surgical certificate - -	 2 0 0 2 0 0	 0 6 6 0 6 6	
Dec. 18	Messrs. Royston and Son, West Pawde, Halifax, wire drawers.	J. D. Hutchinson, Esq., Captain Rothwell, Jas. Haigh, Esq., Borough Court, Halifax.	Having employed a child 11 years of age for four months— Without a surgical certificate - - - Without a school certificate - - - And for having employed him before noon and after 1 o'clock on each day for four months.	 2 0 0 1 0 0 1 0 0	 0 6 6 0 6 6 0 6 6	

RETURN OF INFORMATIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
			In the Sub-Inspectorship of Mr. Lakeman—cont.	£ s. d.	£ s. d.	
1869. April 10	Messrs. Stott and Maude, Victoria Mills, Brighouse, cotton spinners.	John Waterhouse, Wm. Hy. Rawson, and Samuel Shaw, Esqs., West Riding Court House, Halifax.	For having permitted a child to work between the fixed and traversing parts of a self-acting mule whilst the same was in motion.	2 0 0	0 12 6	
			In the Sub-Inspectorship of Mr. Saurin.			
Jan. 26	Brown and Shaw, woollen manufacturers, Galashiels.	Sheriff Milne, Baillie Johnstone, and W. T. Sanderson, Esq., Justice of Peace Court, Selkirk.	Having employed a female after 6 o'clock p.m., and during the night of 10th December 1868.	2 0 0	0 8 0	
Feb. 23	Ballantyne and Co., letter-press printers, Paul's Works, Edinburgh.	A. Milne Home and Wm. Macnair, Esqs., County Court, Edinburgh.	Having employed five females and young persons after 8 o'clock p.m. on 29th December 1868.	5 0 0	0 15 0	Nine women and three male young persons under 16 were detected on this occasion, but as the first prosecution in Edinburgh under the Act of 1867, five cases only were selected.
Mar. 16	Wm. Laidlaw and Sons, woollen manufacturers, Hawick.	Walter Wilson and G. Hardy Fraser, Esqs., Hawick.	Employing 24 women and young persons after 6 o'clock p.m.	24 0 0	0 6 0	
			In the Sub-Inspectorship of Mr. Paget.			
Jan. 18	Joshua Glover, of Ford Mill, Holbury Bridge.	Col. Smyth and William Henry Leatham, Esq., Wakefield, W. R. Court.	Employing a woman after 6 p.m. - - -	2 0 0	0 10 0	

RETURN OF INFORMATIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
			In the Sub-Inspectorship of Mr. Paget—cont.	£ s. d.	£ s. d.	
1869.						
Jan. 18	Thomas Kershaw of Victoria Mill, Horbury Bridge.	Col. Smyth and William Henry Leatham, Esq., Wakefield, W. R. Court.	Employing a child without a school certificate -	1 10 0	0 9 0	
,,	,, ,,	,, ,,	Employing a child without a school certificate -	1 10 0	0 9 0	
Mar. 11	Jonas Bairstow, of Bradford, overlooker.	Timothy Horsfall and W. Anderton, Esqs., Bradford, W.R. Court.	Employing his child more than 6 hours and 30 minutes.	0 10 0	1 0 0	
,,	,, ,,	,, ,,	Employing same child without a school certificate	0 10 0		
,, 12	George Tattersfield, of Spring Place Mill, Weirfield.	J. B. Greenwood and Chas. Wheatley, Esqs., Dewsbury, W.R. Court.	Employing a child without a school certificate -	3 0 0	1 16 0	
,,	,, ,,	,, ,,	Employing a child without a school certificate -	1 10 0		
			In the Sub-Inspectorship of Mr. Chaytor.			
1868. Nov. 19	Stockton Rail Mill Company.	The Mayor, J. H. Wren, R. Jackson, R. Ord, and A. Knowles, Esqs.	Employing a young person without a surgical certificate.	2 0 0	0 14 0	
,,	,, ,,	,, ,,	Employing a young person more than 10½ hours per day.	1 0 0		

RETURN OF INFORMATIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1868.			*In the Sub-Inspectorship of Mr. Chaytor*—cont.	£ s. d.	£ s. d.	
Nov. 19	Stockton Malleable Iron Company.	The Mayor, J. H. Wen, R. Jackson, R. Ord, and A. Knowles, Esqs.	Employing a child without a surgical certificate -	2 0 0		
"	" "	" "	Employing a child without a schoolmaster's certificate.	1 0 0	1 1 0	
"		" "	Employing a child for more than 6½ or 7 hours per day.	1 0 0		
" 20	Andrew McAnany -	J. C. Johnson, B. Proctor, and E. Crawshay, Esqs.	For allowing his son, Robert McAnany, to be employed for more than 6½ or 7 hours per day.	0 5 0	0 11 6	In this case the prisoner caused his son to present a baptismal certificate the dates of which had been altered so as to enable the child to work full time, in fact to issue a forged document.
"		" "	For allowing his son to be employed without a schoolmaster's certificate.	0 5 0	0 8 0	
Dec. 28	Darlington and Stockton Times.	R. Allan, H. F. Pease, and J. Cookson, Esqs.	For employing a young person for more than 10½ hours per day.	2 0 0	0 8 6	
"	" "	" "	For employing a young person for more than 10½ hours per day.	2 0 0	0 8 6	
"	" "	" "	For employing a young person for more than 10½ hours per day.	2 0 0	0 8 6	
"	Darlington Telegraph -	" "	For employing a young person for more than 10½ hours per day.	2 0 0	0 8 6	

RETURN OF INFORMATIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
				£ s. d.	£ s. d.	
1868.			*In the Sub-Inspectorship of Mr. Chaytor*—cont.			
Dec. 28	Darlington Telegraph	R. Allan, H. F. Pease, and J. Cookson, Esqs.	For employing a young person for more than 10½ hours per day.	2 0 0	0 8 6	
			In the Sub-Inspectorship of Mr. Osborn.			
Nov. 6	Thos. Walley and Co., Throstle Nest Mill, Blackburn, cotton manufacturers.	William Stones, James Johnston, and Thomas Bury, Esqs., Town Hall, Blackburn.	Allowing children to work several weeks without obtaining the surgeon's certificate.	1 0 0	0 19 0	Three cases withdrawn on payment of costs.
„	Walkden and Dixon, Whalley Range, Blackburn, paper stainers.	„ „	Allowing children to work several weeks without obtaining the surgeon's certificate.	1 0 0	0 19 0	Three cases withdrawn on payment of costs.
Dec. 3	The Roegreave Cotton Company, Oswaldtwistle, cotton manufacturers.	James Grimshaw and Joseph Ingram, Esqs., Accrington.	Allowing a boy under 13 to work before noon and after 1 o'clock p.m. on the same day.	1 10 0	0 13 6	
„	„ „	„ „	Allowing the same child to work without a certificate of school attendance for the previous week.	1 10 0	0 11 0	
„	Moses Haworth, Alleytroyds Church, cotton manufacturer.	„ „	Allowing his child to work without a certificate of school attendence for the previous week, knowing her to be under 13 years of age.	0 5 0	0 11 0	
1869. Feb. 18	Carus and White, Atlantic Mill, Nova Scotia, Blackburn, cotton manufacturers.	His Worship the Mayor and Thomas Bury, Esq., Town Hall, Blackburn.	Allowing the employment of a child after 2 o'clock p.m. on Saturday.	1 0 0	0 17 0	

RETURN OF INFORMATIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1869.			*In the Sub-Inspectorp of Mr. Osborn*—cont.	£ s. d.	£ s. d.	
April 22	Hindle and Haworth, Royal Mill, Scaitcliffe, Accrington, cotton manufacturers.	James Grimshaw and John Hargreaves, junr., Esqs., Accrington.	Allowing a boy under 13 to work before noon and after 1 o'clock on the same day.	1 0 0	0 9 0	
"	"	"	Allowing the same child to work without a certificate of school attendance for the previous week.	1 0 0	0 9 0	

Appendix No. 3.

Accidents in Factories, Bleachworks, &c., and Works under the Provisions of the Acts of 1864 and 1867.

Table No. I.—*Accidents arising from Machinery.*

Nature of Injury.	Adults.		Young Persons.		Children.		Total.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.&F.
Causing death	17	1	3	2	3	–	23	3	26
Amputation of right hand or arm	7	2	3	1	–	–	10	3	13
Amputation of left hand or arm	5	–	4	–	–	–	9	–	9
Amputation of part of right hand	42	16	42	28	11	3	95	47	142
Amputation of part of left hand	38	13	13	16	7	2	58	31	89
Amputation of any part of leg or foot	2	–	1	–	–	–	3	–	3
Fracture of limbs or bones of trunk	50	7	35	5	9	2	94	14	108
Fracture of hand or foot	54	12	23	25	6	9	83	46	129
Injuries to head and face	44	13	19	16	2	3	65	32	97
Lacerations, contusions, and other injuries not enumerated above	382	170	477	162	83	40	946	372	1318
Total	645	234	620	255	121	59	1386	548	1934

Table No. II.—*Accidents not arising from Machinery.*

Nature of Injury.	Adults.		Young Persons.		Children.		Total.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.&F.
Causing death	46	3	4	–	1	–	51	3	54
Amputation of right hand or arm	–	–	1	–	–	–	1	–	1
Amputation of left hand or arm	–	–	–	–	–	–	–	–	–
Amputation of part of right hand	23	2	1	1	1	–	25	3	28
Amputation of part of left hand	10	1	2	–	–	–	12	1	13
Amputation of any part of leg or foot	2	–	–	–	–	–	2	–	2
Fracture of limbs or bones of trunk	124	6	28	1	10	–	162	7	169
Fracture of hand or foot	47	–	5	–	1	–	53	–	53
Injuries to head and face	271	5	60	2	6	–	337	7	344
Lacerations, contusions, and other injuries not enumerated above	1340	16	309	14	30	6	1679	36	1715
Total	1863	33	410	18	49	6	2322	57	2379
Total number of acidents reported	2508	267	1030	273	170	65	3728	605	4313

Appendix No. 4.

Workshops visited in the district of Mr. Alexander Redgrave during the Half-year ended 30th April 1869.

By Mr. Sub-Inspector Coles.

Millinery Establishments.

1869.
April 13. Charles Haigh, Salford.
John Melling, Salford.

By Mr. Sub-Inspector Rickards.

1868.
Dec. 18. Robinson and Wroe, Holbeck. Brickworks.
Woolley, B., and Son, Holbeck. Brickworks.

1869.
Feb. 11. H. Murray and Sons, Upper Albion Street, Leeds. Cap manufacturers.
April 8. J. Hartley, Briggate, Leeds. Milliner, &c.
Sarah Johnson, Briggate, Leeds. Dressmaker.
Frederick Forster, Briggate, Leeds. Dressmaker.
W. and J. Bickers, Commercial Street, Leeds. Dressmakers.
April 22. Charles Crabtree, Bingley. Paper tube maker.
Mr. Crabtree has 4 boys and 9 girls attending school.

By Mr. Sub-Inspector Henderson.

London.

1868.
Nov. 21. Mr. J. A. Castele, 14, West Street, Saint Giles. Goldbeater.

1869.
Jan. 12. Mrs. Hart, York Terrace, St. John's Wood. Dressmaker.
Jan. 14. Messrs. Winsor and Newton, Rathbone Place, Oxford Street. Artists' colourmen.
Jan. 15. Madame Comer, Grosvenor Gardens, S.W. Dressmaker.

Jan.	20.	Mr. Ince, Oxford Street. Furrier.
		Messrs. Poland and Son, Oxford Street. Furriers.
		Mr. Nicolai, Oxford Street. Furrier.
		Mr. Tucker, 46, Castle Street, W. Shirt maker.
Jan.	22.	Messrs. Moran and Gain, 65a, Poland Street, W. Jewel case makers.
		Mr. Klutz, Great Marlboro' Street. Jewel case maker.
Jan.	28.	Miss Harding, 174, Sloane Street, S.W. Dressmaker.
Jan.	29.	Messrs. Steer and Co., Long Acre. Card manufacturers.
Feb.	6.	Mr. Record, Westbourne Grove, W. Milliner.
Feb.	9.	Messrs. Grant and Gask, Oxford Street, W. Silk mercers.
		Messrs. Hamilton and Co., Greek Street, Soho. Brushmakers.
Feb.	11.	Mr. Charles Mitchell, Little New Street, E.C. Envelope stamper.
		Messrs. Barr and Sugden, King Street, Covent Garden. Seedsmen.
		Messrs. Hooper and Co., Covent Garden. Seedsmen.
Feb.	12.	Messrs. Hovenden and Sons, Soho. Soap manufacturers.
		Pearman, J. W., 13, Castle Street, W. Lithographic printer.
		Messrs. Girdleston and Lewinsky, 15, Frith Street, W. Manufacturing jewellers.
Feb.	15.	Mr. J. Seeley, 129, Gray's Inn Road. Artificial florist.
Feb.	16.	Messrs. J. Carter and Co., Holborn, W.C. Seedsmen.
		Mrs. J. Jobbins, Warwick Court, Holborn. Lithographic printer.
Feb.	17.	Messrs. Terry, Stoneman, and Co., Hatton Garden. Envelope makers.
		Mr. J. Watkins, 19, Greville Street. Upholsterer.
Feb.	18.	Miss Williams, 21, Orchard Street, W. Dressmaker.
Feb.	20.	Miss Winrow, 29, Sloane Street, S.W. Milliner.

Feb. 26. Messrs. Hall and Morris, Britannia Street, N. Paper box makers.

Feb. 27. Mr. R. Hughes, York Mews, Baker Street, W. Artificial florist.

March 19. Mr. J. Sheldrick, Castle Street, E.C. Lithographic printer.

Messrs. Kell Bros., Castle Street, E.C. Lithographic printers.

March 20. Mr. W. F. Whitehead, New Street Square, E.C. Paper colourer.

Messrs. Kell Bros., New Street Square, E.C. Lithographic printers.

March 23. Messrs. Barnard and Son, 67, Stanhope Street, N.W. Colour makers.

Mr. S. D. Warden, Stanhope Street, N.W. Brushmaker.

Messrs. G. Ell and Co., Euston Road. Wheel makers.

April 12. Mr. C. S. Harris, 29, Kirby Street, Hatton Garden. Silver plate manufacturer.

April 15. Miss Jones, 68, Welbeck Street, W. Dressmaker.

Messrs. Lewis and Allenby, Regent Street. Silk mercers.

April 20. Mr. B. Swinstead, 32, Oxford Street. Milliner.

By Mr. Sub-Inspector Oram.

1868. *London.*

Nov. 28. B. Moss and Co., 45, Leman Street. Cabinet makers.

Geo. Joyce, 28, Leman Street. Hats.

D. Spooner and Co., Dock Street. Rice.

Farrow and Jackson, 57, Mansell Street. Wine bins.

Parker and Field, 58, Mansell Street. Guns.

J. C. Christie, 1 and 2, Somerset Street. Brass.

W. Brown, 9, High Street. Blacklead.

Nov. 30. Skaife and Co., Copenhagen Wharf. Roofing.

Dec. 1. J. and W. Birt, Dock Street. Corks.

Dec. 2. J. Haeffel, 31, Bush Lane. Lithographic printing.

Ashby and Co., 32, St. Swithin's Lane. Lithographic printing.

Carter and Co., 3, Salters Hall Court. Lithographic printing.

Dec. 5. C. Coleman, 32, Little Moorfield. Fancy goods.
Morris and Co., Ludgate Hill. Lithographic printers.
T. and H. Sutton, 15, St. Paul's Churchyard. Milliners.
Smith and Hansford, 66, St. Paul's Churchyard. Bonnets.
Mullen and Potter, 52, Bow Lane. Lithographic printers.

Dec. 8. C. Ellison, Charterhouse Square. Artificial flowers.
Lee Brothers, Wood Street. Artificial flowers.

Dec. 9. S. and C. Ward, 158, St. John Street Road. Artificial flowers.

Dec. 10. W. Brooks, 7, Little Somerset Street. Iron.

Dec. 14. Weston and Co., Isle of Dogs. Cement.
Ferguson and Co., Millwall. Masts.
Guaranteed Manure Company, Cubitt Town. Manure.

Dec. 15. S. Meyer, 104, Houndsditch. Lithographic printing.
Bell and Maurice, Back Church Lane. Boilers.
Peter Kuch, Christian Street. Sugar refiner.
C. Wohlgemuth, Christian Street. Sugar refiner.
W. Hewett and Son, 10, Burow Street. Smiths.
J. Robinson and Co., 3, Commercial Road. Shirts.

Dec. 17. Alice Holland, 11, Burdett Road. Shirts.
Hardwicke, Guerie, and Co., Dod Street. Soap.
London Starch Co., Dod Street. Starch.
M. Lister, Millwall. Ship repairer.
J. R. Harper, Three Colt Street. Cooper.
Garford and Son, Emmett Street. Oil.
Owen and Merten, West Ferry Road. Night lights.

Dec. 21. Smith and Co., St. Mary Axe. Lithographic printing.

Dec. 22. Mr. Emery, Brunswick Street. Cooper.

Dec. 23. Daniel Forbes, Spital Square. Lithographic printing.
Moore and Moon, Bishopsgate Street. Pianofortes.
Dec. 24. Imperial Gas Works, Bunken Pond. Gas.
Mr. Davenport, 6, Minerva St. Brass.
Wm. Brady, 231, Hackney Road. Artificial flowers.
Dec. 29. Lowrie, Blott, and Co., Bromley. Chemical Works.
Wm. Pierce, Stinkhouse Bridge. Chemical Works.
Schofield and Co., Bow Common Lane. Brimstone.
T. H. Harris, Bow Common Lane. Soap.
Richard Toms, Bow Common Lane. Blood.
Cassen, Smith, and Co., Bow Common. Oil.
Stevens and Co., Bow Common. Fish manure.
Battley and Butler, Bow Common. Tar distillers.
Phillip Pound, Bow Common. Manure.
Mr. Seaborne, Bow Common. Bone Boilers.
Denton and Jebsum, Bow Common. Oil and varnish.
Goedbloed, Haas, and Co., Bow Common. Fat refiners.
W. Stephenson, Devons Road. Smith.
Henry Holden, Devons Road. Engineer.
Dec. 31. Brill and Co., Clapton Place. Dyers.
A. Lorsont, Silvertown. Leather cloth.
C. Woglemuth, Church Lane. Sugar refiner.
Isaacson and Son, Gowers Walk. Cigar Box.
C. and R. Dame, Lambeth Street. Sugar refiners.
Bryden & Son, Tenter Street. Looking glass.

1869.

Jan. 1. Culverhouse and Co., Osborne Place. Mineral Water.

Glasgow.

Jan. 6. John Brown, Tannery. Ropewalk.
Moore, Taygart, and Co., Cross. Wearing apparel.
Jan. 7. Simpson and Co., 60, Trongate. Wearing apparel.

Donald and Seller, 90, Trongate. Wearing apparel.
Daly, Milwain, and Co., 152, Trongate. Wearing apparel.
A. Gardner, 168, Trongate. Wearing apparel.
T. Chalmers and Co., 167, Trongate. Wearing apparel.
T. Muirhead and Co., 4, Argyle Street. Wearing apparel.
Gardner and Co., 52, Argyle Street. Wearing apparel.
Ferguson and Hardie, 155, Argyle Street. Wearing apparel.
Mackenzie, Allen, and Co., 163, Argyle Street. Wearing apparel.
Stewart and McDonald, Buchanan Street. Wearing apparel.
Kemp and Co., Buchanan Street. Wearing apparel.
Dougall and Mathie, 12 to 16, Jamaica Street. Wearing apparel.
Lauder and Sons, 20, Jamaica Street. Wearing apparel.
McGeoch and Co., 28, Jamaica Street. Wearing apparel.

Jan. 8. Storer and Sons, Sydney Street. Colour works.

Jan. 11. Steele, Coulson, and Co., 80, Canning Street. Brewers.

Jan. 19. Jas. Chalmers, 10, Old Dalmarnoch Road. Sewing machines.

Jan. 20. Chamberlain and Birrell, 14, Buchanan Street. Wearing apparel.
McKenzie and Co., Buchanan Street and North Street. Cabinet makers.
McLelland and Dickson, 203, Buchanan Street. Cabinet makers.
Alexander Free, 27, Gordon Street. Cabinet maker.
Gourlay and Barnett, 10, Jamaica Street. Trimmings.
Wm. Sims and Son, 200, Argyle Street. Trimmings.
Morrison Bryce, 166, Hope Street. Cabinet maker.

J. G. Somerville, 285, Sauchiekall Street. Wearing apparel.
Bryce Martin, 37, St. George's Road. Cabinet maker.
A. W. Glass, 166, Cowcadden Street. Wearing apparel.
J. G. Rowan, 217, Cowcadden Street. Wearing apparel.
Simpson and Lockhart, 60, Great Clyde Street. Cabinet makers.
T. and F. Smith, 20, Great Clyde Street. Cabinet makers.
Gray and Shewan, Main Street. Wearing apparel.

Jan. 23. Williamson and Jack, Miller Street. Wearing apparel.
Porteous and Co., 23, Exhange Square. Wearing apparel.
D. Tait and Co., 191, Argyle Street. Wearing apparel.
Gardner and Russell, Howard Street. Wearing apparel.

Jan. 26. D. Croniar, Cumberland Street. Wearing apparel.
W. Reid, Great Clyde Street. Wearing apparel.
D. Hyam, Argyle Street. Wearing apparel.

London.

Feb. 4. Witherby and Co., 9, Birchin Lane. Lithographic printers.
J. Rowe and Co., 16, Change Alley. Copperplate printers.
N. Pearce and Co., 7, Silver Street. Lithographic printers.

Feb. 5. Venables and Co., 8, Commercial Street. Wearing apparel.
Yates and Co., London Road. Dyers.
W. J. Johnson, 12, Clifton Place. Engineer.

Feb. 8. Collier and Co., Commercial Street. Cocoa and mustard.

Feb. 12. F. Tillett, Victoria Road. Splints.
Globe Bleach Works, Globe Road. Citric acid.

Feb. 13. Ford, Hall, and Son, 85, Golden Lane. Candles.

Miss Spicer, 5, Eldon Street. Wearing apparel.

Feb. 20. Smee Brothers, Little Moorfields. Cabinet makers.

J. and H. Tracy, Shacklewell. Ivory turners.

March 2. Wm. Webb, 146, Old Street. Lithographic printer.

J. J. Sinclair, 1, Norman's Buildings. Drawing boards.

T. B. Johnson, 21, Old Street. Wire drawer.

Evans and Payne, 172, Lever Street. Paper colourers.

March 3. W. Cotter, Whitecross Street. Artificial flowers.

Lion Bros., Chiswell Street. Shoes.

Wm. Towsey, 19, Bunhill Row. Artificial flowers.

March 4. J. Beckett, 2, Georges Yard. Lithographic printer.

Mr. Lazarus, Great Prescot Street. Packing case.

March 9. J. Boyd and Co., 40, Queen Street. Lamps.

Mr. Richards, Clifton Street. Lithographic printer.

March 10. Parratt and Son, 9, Barratt Street. Cardboard.

March 11. G. Rapley, 22, Galway Street. Book edge gilder.

City Road Rice Mills, City Road. Rice.

Mr. Corless, 11, Upper Charles Street. Artificial flowers.

Wright and Riel, 23, Rahere Street. Engineers.

F. Mordan and Co., 326, City Road. Gold pens, &c.

March 13. Mr. Bland, Earls Buildings. Paper colourer.

Mr. Brown, 18, Banner Street. Lithographic printer.

Heard and Co., 20, Banner Street. Paper colourers.

March 16. Mr. Taylor, Jewins Court. Crinolines.

March 17. Mr. Fisher, Redcross Square. Lithographic printer.

W. Judd, Three Tun Square. Lithographic printer.

March 18. E. Sammler, 57, Barbican. Meerschaum pipes.

March 19. McBride and Orr, Jewin Crescent. Collars and braces.
C. Starbuch, Distaff Lane. Packer.
H. Mansfield, 4, Old Fish Street Hill. Lithographic printer.
G. Davenport, Ludgate Hill. Cabinet maker.
March 23. Barry and Co., Ropemaker Street. Chicory and mustard.
March 24. F. Diver, 9, Queen's Road. Artificial flowers.
March 25. The Sultana Hat Co., 33, Gun Street. Hats.
March 26. Lyons and Son, Chiswell Street. Boots and shoes.
April 3. George Lee, Lea Bridge Road. Bricks.
April 6. A. Cooper, 139, Pentonville Road. Artificial flowers.
D. M. Linton, Powell Street West. Paper colourer.
April 7. Mr. Tupper, 4, Barge Yard. Lithographic printer.
April 9. Walton and Son, 15, Wilson Street. Silk.
April 13. Mr. Hoyland, Cambridge Road. Trimmings.
April 21. Mr. Ferguson, 34, West Smithfield. Trusses, &c.
Mr. Brand, 8, Old Bailey. Lithographic printer.
April 23. George Williams, 11, Goswell Terrace. Puzzles.
April 24. C. and J. Webb, 17, Coleman Street. Clothiers.
Mr. Wilson, 42, Wood Street. Artificial flowers.
April 27. Marsh and Chippingdale, Bromley Rice Mills. Rice.

By Mr. Sub-Inspector Lakeman.

1868.
Nov. 18. Nicholson and Co., Crown Street, Halifax.
Pearson and Co., Crown Street, Halifax.
Willis and Co., Crown Street, Halifax.
Foster and Co., Princes Street, Halifax.
Alfred Pigg, Old Market, Halifax.
Nov. 19. E. Barker, Corn Market, Halifax.
M. Scholfield, Northgate, Halifax.
Visited to know the feeling of the work-people upon the changing the half-holiday from Saturdays to Fridays.

Blagborough and Co., Silver Street, Halifax. Milliners and dressmakers.
Miss. Hall, Old Market, Halifax. Milliner and dressmaker.
Dec. 7. Halliday Bros., Howcans, near Halifax. Brickmakers.

1869.

Jan. 6. Mason and Co., Ipswich. Seed crushers.
Webber, Hedge, and Co., Ipswich. Seed crushers.
Jan. 16. Robert Sayle, Cambridge. Female clothier.
Mrs. Harper, Cambridge. Stay maker.
Feb. 16. Kaye Aspinall, Rastrick. Quarry owner.
Thos. Bradbury, Rastrick. Quarry owner.
John Marshall, Elland Edge. Quarry owner.
Mr. Beaumont, Elland Edge. Quarry owner.
John Lagge, Elland Edge. Quarry owner.
Marsden and Sons, Elland Lower Edge. Quarry owners.
Stead and Co., Elland Lower Edge. Quarry owners.
Aspinall and Co., Elland Lower Edge. Quarry owners.
Norminton and Co., Elland Lower Edge. Quarry owners.
Thos. Sugden, Elland Lower Edge. Quarry owner.
Feb. 27. Spencer and Co., Halifax. Charlestown Ropewalk.
J. Farrar, Halifax. Paper Mills Ropewalk.
March 31. Thos. Blackburn, Brighouse. Phœnix Ropewalk.
Abm. Sharp, Brighouse. Rope maker.

By Mr. Sub-Inspector Oswald.

1868.

Nov. 26. J. Rowell, Hanington Street, Nottingham. Lace clipping.
Nov. 28. Mr. Dewick, Broad Marsh, Nottingham. Lace clipping.
Dec. 9. Carrier & Sons, Mount Street, Nottingham. Hosiers.
W. Palethorpe, St. James' Street, Nottingham. Lithographic printer.

1869.

Jan. 8. J. C. Downham, Market Place, Mansfield. Draper.

		Baxter & Heine, Market Place, Mansfield. Draper.
		Jas. Gascoigne, Church Street, Mansfield. Boots.
		Miss. Simkins, Market Place, Mansfield. Dressmaker.
		Mr. Birks, Market Place, Mansfield. Brushes.
		Mrs. Smith, Market Place, Mansfield. Dressmaker.
Jan.	12.	Samuel Baker, Park Wharf, Nottingham. Rope walk.
Jan.	21.	F. and A. Cleaver, The Meadows, Nottingham. Lace dressers.
Jan.	23.	C. G. Taylor, Newmarket, Nottingham. Rope walk.
		John Hooley, Union Road, Nottingham. Boots.
		H. Carter, Stretton Street, Nottingham. Boots.
Jan.	28.	H. F. Marshall, Basford, near Nottingham. Lace clipping.
Jan.	30.	E. Marshall, Wollaton Street, Nottingham. Lace mending.
		Leopold Hamel, Broadway, Nottingham. Lace warehouse.
Feb.	5.	James Warner, Mansfield Woodhouse. Hosier.
Feb.	10.	H. Gascoigne, Woodborough Road, Nottingham. Ropewalk.
		T. Smith, near St. Mark's Church, Nottingham. Ropewalk.
		W. Coates, St. Ann's, Well Road, Nottingham. Ropewalk.
Feb.	13.	J. A. Howitt, Stoney Street, Nottingham. Lace warehouse.
Feb.	24.	Mrs. Holmes, New Radford, near Nottingham. Lace clipping.
March	1.	Oaksford and Son, Houndsgate, Nottingham. Box makers.
March	5.	Mr. Bray, Rotten Row, Derby. Milliner.
		G. Goldschmidt, Halifax Place, Nottingham. Box maker.
March	12.	Dent, Allcroft, and Co., St. Mary's Place, Nottingham. Gloves.
March	13.	W. J. King, Riste's Place, Nottingham. Box maker,
		R. F. James and Co., Houndsgate Nottingham. Hosiers.

March 19. Miss Moore, Great Alfred Street, Nottingham. Lace dressers.
C. Eden, Great Alfred Street, Nottingham. Lace dressers.
W. Thornley, Great Alfred Street, Nottingham. Lace dresser.
W. Young, Great Alfred Street, Nottingham. Lace dresser.

April 7. W. Young, Great Alfred Street, Nottingham. Lace dresser.

April 9. W. and H. Slater, Uttoxeter Road, Derby. Brickyard.
J. Harper, Uttoxeter Road, Derby. Brick yard.

April 10. Mr. Kirk, South Parade, Nottingham. Draper, &c.

April 15. Bailey and Bardin, Kilburn, near Belper. Brickyard.

April 16. Cinder Hill Co., Cinder Hill, near Bulwall. Brickyard.

April 21. Joseph Challand, Farnsfield, near Southwell. Brick yard.

By Mr. Sub-Inspector Gould.

Feb. 1. T. Plant, Fitzwilliam Street. Dram flasks.

Feb. 20. Wm. Charlesworth, Backfields. Buttons.
J. Deakin and Son, Carver Lane. Buttons.
Elis Ellis, Earl Street. Buttons.
A. Guest, Soho Wheel. Buttons.
S. Meggitt and Sons, Effingham Road. Buttons.

Feb. 23. J. Cutts, Vicar Lane, Buttons.
S. Newham, 43, Cambridge Street. Buttons.
Eli Pashley, 13, Eyre Lane. Buttons.
J. Roberts, 2, Chester Street Court. Buttons.
Wm. Tomkinson, Porter Street. Buttons.
Wm. Warrington, 4, Union Lane, Buttons.

By Mr. Sub-Inspector Paget.

Feb. 19. 1. D. and I. Craven, Pearson Place, near Thornton. Shawl manufacturers.

March 22. 2. I. B. Milner, Lister Hills Road, Bradford. Reed and heald maker.

April 5. 3. I. Rhodes and Son, Cheapside, Bradford. Wire works.

April 5. 4. J. Ridsdale and Co., Bath Street, Bradford. Engravers.

April 27. 5. John Ramsden, Brook Street, Bradford Reed and heald maker.

All except No. 1 visited to ascertain whether they were to be considered workshops or factories. No. 1 is in a country place, and I intend to visit it regularly. There is, I believe, no local authority to carry out the Act.

By Mr. Sub-Inspector Chaytor.

1869.

Feb. 6. Mrs. Robertson, Milliner, Newcastle-on-Tyne.

By Mr. Sub-Inspector Saurin.

Edinburgh.

1868.

Nov. 25. — Davidson, 54, N. Hanover Street. Milliner and Dressmaker.

1869.

May 12. — Davidson, 54, N. Hanover Street. Milliner and Dressmaker.

April 19. P. McGregor, Sons, and Co. George Street. Muslin and lace manufacturers.

By Mr. Sub-Inspector Cullen.

McDougall and Co., 12, High Street, Inverness. Clothiers.

McBean and Sons, 35, Union Street, Inverness. Clothiers.

R. Frazer and Sons, 108, Church Street, Inverness. Clothiers.

By Mr. Sub-Inspector Osborne.

1868.

Nov. 14. Wayne, Blackburn. Brickmaker.
Eccles, Blackburn. Brickmaker.

Nov. 21. T. Pomfret, Northgate, Blackburn. Rope-maker.
T. Hart, Billinge Street, Audley. Rope-maker.

Nov. 26. Mrs. Willan, Duke Street, Blackburn. Steam confectionery works.
Boyle, Blackburn. Preserve works.

Dec. 3. Mrs. Hardman, Burnley. Milliner.
Miss Hargreaves, Burnley. Milliner.
J. Dodgshon, St. James Street, Burnley, Silk Mercer, &c.

H. Wadsworth, Manchester Road, Burnley. Milliner, &c.
Stonehouse and Grime, Burnley. Milliners, &c.
J. T. Terry, Burnley. Milliner, &c.
S. A. Bell, Burnley. Silk mercer, &c.
Smith and Holding, Burnley. Milliners, &c.
R. Houlden, Burnley. Tailor.
Dewhurst, Burnley. Draper, &c.
Pemberton, Bros., Burnley. Drapers, &c.

Dec. 7. Mrs. Chippendale, Clitheroe. Milliner.
Dec. 9. T. Hart, Blackburn. Ropemaker.
Dec. 12. Bateson and Co., Blackburn. Mercers, &c.
Clegg, Darwen Street, Blackburn. Ropemaker.
Dec. 16. Smith, Accrington. Brickmaker.
Dec. 17. Boyle, Market Place, Blackburn. Confectioner.
Dec. 29. Bateson and Co., Blackburn. Mercers, &c.
Wilson, Church Street, Blackburn. Hosier, &c.
Geo. Smith, St. Peter Street, Blackburn. Heald knitter.
J. Buller, Wensleyfold Lane, Blackburn. Heald knitter.
Pomfret, Blackburn. Ropemaker.

1869.
Jan. 14. Bramley and Co., Northgate, Blackburn. Tallow chandlers.
Shakeshaft and Co., Market Place, Blackburn. Tallow chandlers.
Shorrock and Co., Market Street, Blackburn. Tallow chandlers.
Jan. 15. Parkinson, Blackburn. Tin-plate worker.
Jan. 20. Bentley and Welburn, King Street, Blackburn. Milliners.
Jan. 26. Boyle and Co., Market Place, Blackburn. Confectioners.
Jan. 29. J. Dodgshon, Burnley. Mercer, &c.
Tillotson, Burnley. Picker maker.

By Mr. Sub-Inspector Meade King.

1868.
Nov. 27. Du Fay and Co., 32, Booth Street. Warehouse.

1869.
Feb. 11. J. Ryder, Back Piccadilly. Warehouse.

Feb.	18.	Dehn and Melchior, Union Street. Warehouse.
		S. A. Meyer and Co., 5, Newton Street. Warehouse.
		Ralli and Mavrogani, Hilton Street. Warehouse.
Jan.	29.	A. Winterbottom, 24, Mosley Street. Warehouse.
Mar.	9.	Droege and Co., 123, Portland Street. Warehouse.
		P. Souvazonglu, Dickinson Street. Warehouse.
		Ziegler and Co., Dickinson Street. Warehouse.
Mar.	24.	Kessler and Co., Hilton Street. Warehouse.
		Schilizzi and Co., Lever Street. Warehouse.
		Watts and Williamson, Port Street. Warehouse.
Mar.	25.	Jackson, Brierley, and Briggs, Cannon Street. Warehouse.
Mar.	9.	T. C. Hansbrow, 28, Dickinson Street. Packer.
Mar.	20.	R. I. Hampson, South Parade. Packer.
Mar.	31.	J. G. Wilkinson, Brazenose Street. Packer.
April	12.	John Holmes, 31, Dale Street. Packer.
Mar.	15.	Thos. Knowles, 9, Watson Street. Fustian cutter.
April	13.	Michael Slater, 9, Fetter Lane. Fustian cutter.
1868.		
Dec.	2.	Wm. Fairweather, Fairfield Street. Skirts, &c.
Dec.	5.	I. and W. Lomax, 79, Oxford Street. Cabinet.
Dec.	14.	Richards and Hilton, Wilmot Street. Hats.
Dec.	17.	R. B. Edmondson and Sons, New Wakefield Street. Glass stainers.
1869.		
Jan.	15.	Williams and Co., Bradford. Tiles, &c.
Feb.	23.	D. Brown, 34, Tib Street. Lithographic printer.
Feb.	16.	Alfred Lindon, 44, Minshull Street. Bobbins.
Mar.	2.	John Smith, Mayes Street. Saw mill.
Mar.	3.	John E. Kirby, Redbank. Banding.
April	3.	E. R. Gledhill, 39, Oldham Street. Stationery, &c.
April	9.	Jas. Lowe, Oldham Street. Drapery, &c.

TWENTY-THIRD HALF-YEARLY REPORT under the Laws relating to Factories and Workshops, by ROBERT BAKER, Esq.

Factory Inspectors' Office, Whitehall,
30th April 1869.

SIR,

I have received from the gentlemen appointed to administer the laws regulating the hours of labour in factories in their districts respectively, under my direction, the usual weekly returns of their visits, and their comments upon them, for the last half-year, and it is my duty to inform you that so far as my division is concerned these laws have been satisfactorily obeyed, with some exceptions. I have to thank you for another Sub-Inspector in the person of Mr. Taylor, who has been stationed at Cork, as most convenient for forming a third district for Ireland, the increased number of works in that part of the kingdom by the Factory Act, 1867, and the distances to be travelled, having rendered this addition to my staff necessary.

With respect to the administration of the law in the textile districts I have nothing particular to report to you. The state of trade has been and continues to be so bad in the cotton industries, that where the factories have not wholly ceased to work, short time has been generally adopted; and the prospects for the future are, I fear, not of much greater promise, excepting under still shorter work and difficulties which it is very painful to contemplate. As might have been expected, in consequence of the continued improvements in machinery, the spinning spindles in this branch of industry, which indicate the consumption of raw material, have increased within the last quinquennial period, namely, from 1862 to 1867, over the previous one, *i.e.* between 1856 and 1862, but not in the same proportion. In the former it was 8 per cent., in the latter it has only been 5 per cent.; but the number of mills has declined as much as 13 per cent. Judging by the recent Parliamentary returns, in each of these periods respectively, the spinning spindles exceeded 30,000,000, the exact number at present being 32,000,014. The power looms too have decreased 5 per cent. in number since 1862. They had increased very rapidly, even as much as 33 per cent., between 1857 and 1862; but, as I showed in my report for April 1868, had attained their maximum number then about, and have since decreased. The total falling off of the numbers of persons employed in cotton manufacture is very sad to contemplate,

being not less than 50,505 within the last five years, or 12 per cent.

And it is evident too that the introduction of additional female and child labour into it since the American war, has been regarded as one means of attempting to ward off the evil to come, with which it is now overtaken. The employment of male children increased not less than 53 per cent. in 1862 over 1857, but that of female children, not less than 78 per cent. Between 1862 and 1868, the employment of male children has increased only 163 persons in all, whilst that of female children has added 9 per cent. to the high per-centage of 1862.

So, in like manner, the employment of males of between 13 and 18 years of age has decreased 23 per cent., and of those over 18, 15 per cent., but of females generally, less children, 13 per cent. only. Thus we see how severely the cotton trade has suffered. Let us hope that it is not a decadence, only an interruption. But whatever it is—whether arising from causes over which the manufacturers have had no control, or from an interruption to their supply of raw material which they had not foreseen, or from an over production which they had not measured against such a calamity as a want of supply, or the possibly rapid growth of a similar industry in other countries with which they would also have to compete, the fact is too patent to be ignored.

With reference to the woollen trade, that trade, which from its hand to mouth condition and its long continuance amongst us, has lost its regular cycles of good and bad times, at least so much so, that they can no longer be calculated on with certainty, its increases both in spinning and weaving machinery, as well as in its employment of the people, appear to have very considerably and steadily augmented. Possibly some of the extensions of its comparative figures may be attributed to the new and altered form in which they have been recently collected and to the new branches added, such as felt and shoddy; but the total increase of its employés of both sexes, amounts to 130,387, against 86,983 in 1862, and 78,091 in 1856, no matter what these branches may be. Power looms in the woollen trade are a pretty safe criterion to be guided by as to its soundness and prosperity; and to find these increased between 1856 and 1862 from 14,453 to 21,770, and in 1867 to 47,199, is an unmistakeable proof of the capabilities of this industry and of its successful development.

But in woollen, as in cotton, there is the same remark to be made as in the cotton trade, with reference to the increased employments of female and child labour. In the last

of the two quinquennial periods, from whence all these comparisons are drawn and to which reference has just been made, male child labour increased 15 per cent., and female child labour 19 per cent. The employment of males between 13 and 18 years of age increased 27 per cent., but that of females at all ages, less children, as much as 82 per cent.; the total increase of all the males employed being 28 per cent., and of all the females 77 per cent.

The worsted industry appears to have been by far the most active, and to have made the most rapid strides of all the textile trades. This is not surprising, seeing that it is a manufacture of universal appreciation and suitable to so many climates. Happily for us, our home and colonial flocks give us the supplies of raw material, and seldom excite in us apprehensions of failure. The worsted mills have increased not less than 32 per cent. within the last five years, and the total number of employés from 86,063 to 131,896, or 43 per cent.; whilst the spinning spindles have increased 70 per cent., and the looms 84 per cent. Again we have to notice the increased employment of child labour, and particularly of female children, which is not less than 110 per cent.; that of males being 84 per cent. The total increase of female labour, inclusive of children, is 57 per cent., and of male labour, 45 per cent. during the past five years.

The flax industry returns show also very satisfactory increases. In the last quinquennial period that of factories is 8 per cent., which is quite as much as could be anticipated for a branch of trade in which the supplies of raw material fluctuate so often with seasons, and depend upon so many accidental causes and circumstances. The total number of spindles, including those of jute and hemp, amounts to 1,679,357, or 34 per cent. over those of the previous five years; whilst the increase of power looms is not less than 128 per cent. The increase of the total number of persons employed is 135,333, against 94,003, or 43 per cent.

Ireland seems now to be advancing in the manufacture of flax to an extent which could hardly have been anticipated a few years ago. In other parts of the United Kingdom it is evidently declining in favour of the sister country. For example, in 1862 the flax factories of England and Wales amounted to 136, with 344,308 spindles, and 2,160 power looms. These are reduced now to 128 mills, though the spindles and looms have increased, the former to 437,623, and the latter to 5,086. But in Ireland there are now 143 factories, containing 894,273 spindles and 12,969 power looms, against 100 factories, 592,981 spindles, and 4,666 power looms in 1862.

In Ireland, however, the employment of female labour is not superseding that of males. On the contrary, the increases are mainly in favour of the male population; with respect to the jute trade it is also becoming much more considerable of late years; but as it is not extensive in my division, I do not speak of it.

Lastly, it is in the silk industry that we are to look for the greatest amount of depression and decrease within the last five years. Up to 1862 the increase in mills and machinery was considerable; but since that period the decreases in every item but power looms, have been most remarkable. For example, the mills have decreased 30 per cent.; spinning spindles 36 per cent.; the employment of male children 125 per cent.; of female children 149 per cent.; males between 13 and 18, 28 per cent.; of females above 13, 26 per cent.; of males above 18, 21 per cent. The total number of employés are reduced from 52,429 to 41,017, or 27 per cent.

I append the table in which these increases and decreases in the five great branches of our textile works may be seen. They may perhaps be useful to the statist or political economist (*see Table on page* 76.)

The question of the cheapening of labour by the extended employment of women and children from home, is one of ever deepening interest in a country like ours. The consequences upon our general social condition, together with the extension of education amongst the industrial classes in combination with labour, are considerations which cannot fail to interest us every year more and more as progress becomes more rapid and its consequences become invested with more serious responsibilities. Whatever affects the female character, its influence on society,—on her own life as well as on the conditions of life in her offspring, is being gradually encircled with contingencies, the result of which, to those who see them in their various phases, it is not possible to regard without considerable anxiety. The progress of luxury and the antagonism to social teaching, are advancing with about equal strides. The time seems, indeed, to be fast approaching when, the cheapness of production, with a certain amount of excellence only, is to be the trader's great highway to prosperity, and when whatever relates to social life is to succumb to the competition which is running to and fro upon it.

Thus the hope of those who see these culminations certain, of any counterpoise by which to adjust them to the altered circumstances of the working population, now in a position to legislate for themselves,—biding but their time

TABLE showing the Increases and Decreases of the various Branches of the Textile Trades in the United Kingdom in the Quinquennial Periods of 1857 to and 1862 to 1867.

Mills.			Spindles.			Power Looms.			Persons employed.																							
									Children.						Males between 13 and 18.			Females. above 13.			Males above 18.			Total.						Both.		
									Males.			Females.												Males.			Females.			Males and Females.		
——			——	Increase.	Decrease.	——	Increase.	Decrease.	—	Increase.	Decrease.	—	Increase.	Decrease.	——	Increase.	Decrease.	——	Increase.	Decrease.	——	Increase.	Decrease.	—	Increase.	Decrease.	—	Increase.	Decrease.	——	Increase.	Decrease.
				per cent.			per cent.			per cent.			per cent.			per cent.			per cent.			per cent.			per cent.			per cent.		
Cotton	1857	2,210	28,010,217	—	—	298,847	—	—	14,363	—	—	10,285	—	—	38,941	—	—	211,742	—	—	103,882	—	—	157,186	—	—	222,027	—	—	379,213	—	—
	1862	2,887	30,387,467	8	—	399,992	33	—	22,081	53	—	17,707	78	—	41,207	5	—	251,306	18	—	119,268	18	—	182,556	16	—	269,013	21	—	451,569	19	—
	1867	2,549	32,000,014	5	—	379,329	—	5	22,244	0	—	19,430	9	—	34,324	—	23	220,605	—	13	104,461	—	15	161,029	—	13	248,035	—	12	401,064	—	12
Woollen	1857	1,505	1,786,972	—	—	14,453	—	—	3,774	—	—	2,929	—	—	11,134	—	—	30,579	—	—	30,675	—	—	45,583	—	—	33,508	—	—	79,091	—	—
	1862	1,679	2,182,609	22	—	21,770	51	—	3,362	—	12	2,607	—	12	11,213	—	—	34,622	13	—	35,179	11	—	49,754	9	—	37,229	11	—	86,983	9	—
	1867	1,766	4,262,669	95	—	47,199	116	—	3,881	15	—	3,108	19	—	14,273	27	—	62,923	82	—	46,212	31	—	64,366	28	—	66,021	77	—	130,387	49	—
Including felt and shoddy.		11 / 1																													
Worsted	1857	525	1,324,549	—	—	38,956	—	—	4,828	—	—	6,400	—	—	7,116	—	—	51,371	—	—	18,079	—	—	30,023	—	—	57,771	—	—	87,794	—	—
	1862	532	1,289,172	—	2	43,048	10	—	6,268	29	—	6,910	7	—	6,614	—	7	47,652	—	7	18,619	2	—	31,501	4	—	54,562	—	5	86,063	—	2
	1867	703	2,193,210	70	—	71,666	84	—	11,534	84	—	14,535	110	—	9,641	45	—	71,415	49	—	27,712	32	—	45,890	45	—	86,006	57	—	131,896	53	—
Flax	1857	417	1,288,043	—	—	7,689	—	—	853	—	—	953	—	—	8,950	—	—	55,863	—	—	13,643	—	—	23,446	—	—	56,816	—	—	80,262	—	—
Hemp } Jute }	1862	437	1,252,236	—	2	15,347	99	—	1,450	69	—	2,194	130	—	8,654	—	3	65,039	16	—	15,466	13	—	26,770	14	—	67,233	18	—	94,003	17	—
„	1867	472	1,679,357	34	—	35,047	128	—	2,133	47	—	3,192	46	—	12,305	42	—	92,681	42	—	25,064	61	—	39,502	48	—	86,831	29	—	135,333	43	—
Silk	1857	460	1,093,799	—	—	9,260	—	—	719	—	—	967	—	—	4,106	—	—	33,823	—	—	10,121	—	—	16,899	—	—	39,238	—	—	56,137	—	—
„	1862	771	1,338,544	22	—	10,709	15	—	702	—	—	1,130	19	—	3,224	—	27	32,029	—	5	10,162	—	—	15,530	—	8	36,899	—	6	52,429	—	7
„	1867	591	978,168	—	36	14,625	36	—	311	—	125	453	—	149	2,508	—	28	25,250	—	26	8,374	—	21	12,177	—	27	28,840	—	27	41,017	—	27

amid the uneven policies which are struggling on the same great wave of competitive power, lies in the steady combination of labour and education; an education, which shall render the next generation intellectually strong, and thus enable it to think politically and economically right; an education, that will enable it to exercise a sound judgment on matters with which it is familiar from their being contingent, and from which they will not be led astray by any efforts brought to bear upon them for the sake of ephemeral popularity. It is this educational power that constitutes the great value of the half-time system; a system which educates men and instructs women without their being aware that they are compelled to learn; which lifts parents almost nurtured in immorality, step by step out of vicious habits by the manifest excellence of their children; on which we shall have to depend more and more in this great commercial country for the education of all labour—in the purely industrial districts by a stricter surveillance over the employments of the young; in the rural neighbourhoods by an extension of schools, and by a peripatetic form of teaching where poverty or distance renders collective teaching next to impossible.

That the social condition of the workers in factory labour will have to be kept more and more in view, as females are drawn from the mother's eye and committed to the forms and manners of industrial life, cannot be doubted; for, says Leckie, in his admirable History of European Morals, "of all the departments of ethics the questions "concerning the relations of the sexes, and the proper "position of women, are those upon the future of which "there rests the greatest uncertainty. History tells us as "civilization advances the charity of men becomes at once "warmer and more expansive, their habitual conduct more "gentle and more temperate, and their love of truth more "sincere; but it also warns us that in periods of great "intellectual enlightenment and of great social refinement "the relations of the sexes have been most anarchical. It is "impossible to deny that the form which these relations at "present assume has been very largely affected by special "religious teaching, which, for good or ill, is rapidly "waning in the sphere of Government, and also that cer-"tain recent revolutions in economical opinion and industrial "enterprise have a most profound bearing upon the subject. "The belief that a rapid increase of the population is "always eminently beneficial, which was long accepted as "an axiom by both statesmen and moralists, and was made "the basis of a large part of the legislation of the first, and

" of the decisions of the second, has now been replaced by " the directly opposite doctrine, that the very highest " interest of society is not to stimulate but to restrain " multiplication, diminishing, the number of marriages and " of children. In consequence of this belief and of the " many factitious wants that accompany a luxurious civiliza- " tion a very large and increasing proportion of women are " left to make their way in life without any male protector, " and the difficulties they have to encounter through " physical weakness, have been most unnaturally and most " fearfully aggravated by laws and customs which, resting " on the old assumption that every woman should be a wife, " habitually deprive them of the pecuniary and educational " advantages of man, exclude them absolutely fro m very " many of the employments in which they might earn a " subsistence, encumber their course in others by a heartless " ridicule, or by a steady disapprobation, and consign in " consequence many thousands to the most extreme and " agonizing poverty, and perhaps a still larger number to " the paths of vice. At the same time a momentous revolu- " tion, the effects of which can as yet be but imperfectly " described, has taken place in the chief spheres of female " industry that remain. The progress of machinery has " destroyed its domestic character. The distaff has fallen " from the hand. The needle is being rapidly superseded, " and the work which from the days of Homer to the " present century was accomplished in the centre of the " family has been transferred to the crowded manufactory. " The probable consequences of these things are among the " most important questions which occupy the moralist or " the philanthropist, but they do not fall within the " province of the historian. That the pursuits and educa- " tion of women will be considerably altered, and these " alterations will bring with them some modifications of the " type of character, and that the prevailing moral notions " concerning the relations of the sexes will be subjected in " many quarters to a severe and hostile criticism, may " safely be predicted. Many wild theories will doubtless " be propounded. Some real ethical changes may, perhaps, " be effected, but these, if I mistake not, can only be within " definite and narrow limits. He who will seriously reflect " upon our clear perceptions of the difference between " purity and impurity, upon the laws that govern our " affections, and upon the interests of the children who are " born, may easily convince himself that in this, as in all " other spheres, there are certain eternal moral landmarks " which can never be removed."—*History of European Morals from Constantine to Charlemagne.*

Undoubtedly the extension of the Factory Act, 1867, to other trades than textiles, whereby the educational clauses have had a further opportunity of development, has not been productive of the same satisfactory results; and this failure (as it appears to be) has been impulsively or with design, attributed to the half-time system being itself objectionable or invalid. Ignorant masters have been delighted to comment on it thus; and some, who call themselves enlightened also, have held it up far and wide as a proof of their prescience, when they predicted before the Acts were applied to them, "how fallacious "it was to assert or to expect that an Act for the restriction "of textile labour and to educate its employés, could ever be "found of general application." Others again, with a vast profession of enlightenment, have gone so far as to attribute to it an increase of crime among the working population in consequence of "little children being turned into the streets "rather than that the employers should be saddled with the "burden of their education." Thus Mr. Alderman Saddler, of Birmingham, at one of the corporate meetings, with a gravity which was a guarantee of his sincere belief, stated "that the result of the Factory Act had been to turn "thousands of children out of employment."

"Manufacturers and parents of children had had so many pains and penalties imposed upon them by the Factory Act that rather than submit to them, child labour was being dispensed with; and machines were being introduced which rendered it unnecessary. The result was, that these children went into the streets. They were told that the Factory Act was an educational measure. Truly: but what kind of education did it give? The children were not allowed to be employed in the manufactories more than half their time; the other half the law said they should be at school; but there was no school to take them to, and of course no penalties could be imposed if they did not go. So, instead of going to school, they idled in the streets. In his opinion, the Legislature ought to have provided schools before shutting the children out of employment, so that there could be no excuse for them staying away. The following table sets forth the number of children under 16 who had been before the magistrates in 1867 and 1868, and showing the increase that had taken place:—

	1867.	1868.	Increase.
Felony - - -	349	427	78– 22 per cent.
Misdemeanor - -	217	425	218–100 „
Drunkenness - -	7	10	3
Vagrancy - - -	174	329	155– 89 „
Not been at work -	267	590	323–120 „
Been at work - -	470	601	131– 28 „
Total under 16 years -	747	1,191	444– 60 „
Total under 13 years -	341	548	207– 60 „

Mr. Saddler attempted to illustrate his arguments by the above table, showing the number of children and persons between 13 and 16 years of age that had been taken before the magistrates for various criminal and social offences in 1867 and 1868 (and the increase per cent. that had taken place among them), assuming these to be years in which the Factory Acts had been introduced into Birmingham.

An examination of this table, however, only shows us, by its evidence from within, that the moral and social condition of Birmingham must have long suffered from either its employments or the inefficiency of its local supervision and example; and the corollary is, that it has not been the Factory Act, but the want of it, which has produced this extreme necessity for magisterial interference. As neither the Factory Act, 1867, nor the Workshops Act, were passed till August 1867, and did not come into operation till the 1st of January 1868, we may dismiss from this record of Mr. Saddler's, any charge made against either of these Acts as to their producing any part of the 747 offenders, criminal and social, quoted in his table, in 1867; but it remains as proof of the immoral and unsocial condition of the Birmingham juvenile population before the Factory Act had attempted to introduce education amongst them, and "when there was no school to take them to."

Then, in dealing with the difference between 747 offenders in 1867 and 1,191 in 1868, shown by this table to be the increment in Birmingham of this class, or a total of 444, as Mr. Saddler's figures further show that, the number of offenders over and under 13 was nearly equal, and as those only under 13 could possibly come under the compulsory education of either Act, even this total of 444 divides down to 222 the number under 13. And here again these figures would be at fault in support of his argument. For although the 222 children might be under 13 years of age, and therefore liable to "be turned into the streets" if not employed under ordinary circumstances, yet, as for the first six months of 1868, children of 11 years of age could work full time without attending school, and up to July 1870 children of 12, it is clear that there need not have been any turning into the streets at all of any children, unless they were under 11 years of age; and only then during the latter half of the year of Mr. Sadler's largest increment. As he has not shown us how many children under 11 were employed when his figures were collected, we are prevented from a closer analysis of them than this; but it is clear that under the Factory Act their numbers may be reduced almost if not altogether to "nil" and in like manner, his

argument upon them. But Mr. Saddler was guilty in this public statement of his, of a still graver error in insinuating even, that this increment of criminal and social offenders in 1868 was attributable to the expulsory tendencies of the Factory Act of children from employment; for, as it was well explained by Mr. Jesse Collings in his reply, "in Bir-"mingham the number of workshops is very much larger "than the number of factories, and the children employed "in workshops are not in any way affected by the Factory "Acts." This increase of offenders therefore could not be attributed even to the Workshops Act, since it has never yet been put in operation in Birmingham, the town council as yet, and Mr. Saddler among the number, having taken no interest in bringing these outcasts into the education which even that Act might have afforded. Mr. Collings seems to have suggested the true solution to Mr. Saddler's figures. He said that, out of 45,000 "children in Birmingham there were 21,696 wandering "about the streets, neither at school nor at work; and "26,000 that could neither read nor write; and that as to "schools, there were now between 9,000 and 10,000 va-"cancies which could be filled up and were not."

In like manner, and with as much truth, it has been asserted by other advocates against the Factory Act that its educational clauses were and had ever been a failure; and the condition of certain towns in Lancashire has been cited to prove it. But the fact is, that the number of short-time children employed in the textile districts, with the exception of one year (1850) when trade was excessively bad, has never been less than 6 per cent. of the whole number of the employés in factories; and that in 1862 this percentage was increased to 8, and in 1867 to 9 per cent., as may be seen from the following table, which gives the number of children at school in the textile districts in the recited years,—

1836	Children at school	4,958	Total persons employed		345,046
1839		29,214	do.	do.	422,400
1847		37,029	do.	do.	544,876
1850		35,122	do.	do.	596,082
1856		46,071	do.	do.	682,497
1861		64,411	do.	do.	775,534
1867		84,841	do.	do.	854,243

But admitting it to be true that, as yet in Birmingham, the educational clauses of the Factory Act have been comparatively inoperative, mainly on account of the depression in trade and the constant non-necessity for children's labour, yet, the clauses of the Act restricting the hours of work

during the winter months of 1868 and 1869, and the stoppage of the works at 7 o'clock p.m. have enabled the young employés to attend night schools in considerable numbers. In Birmingham proper for example, in the year ending January 1st, 1867, the number of young persons attending night school of both sexes was 1,317, on the average; but this number had increased at the close of December 1868 to not less than 2,000, being an increase of 51·8 per cent., and it was anticipated that this year it would be still further increased to 3,000. In like manner in the South Staffordshire and Worcestershire districts at the close of 1867, the number of both sexes attending night school in the former was 912, which increased at the close of 1868 to 1,225; and in the latter from 342 to 796, of whom 278 were females. The report also of the Midland Institute in 1868 showed, "that "owing probably to the early closing of manufactories "the classes had been much better attended, and the "penny arithmetic classes had been so overcrowded that "numbers were obliged to be refused for want of room." Under all these facts, being examples only and not all that might be said upon the subject, there appears no reason to doubt the efficiency of the Factory Acts to accomplish their work in the education of the operative classes. Far be it from me to say it is the only method or the best method of educating the people. In a country of old institutions and of established ideas, a more open and universal compulsory system might possibly succeed as a national necessity; but the half-time system has not yet had a fair trial in all trades, and trade employs a vast amount of our population. Where it has, it has succeeded admirably. The schools that are now scattered over the industrial districts are generally of the highest class. The branches of knowledge taught in them may be a little high for the class of scholars, but they are calculated to bring out the intellect and the capacity of the generation. The system itself is in a quiet way compulsory, but it is a compulsion into which the people are not driven, but slide; in which they unconsciously find themselves without knowing it, and are satisfied when they begin to see the benefits it confers.

That there are masses of "gutter children," as they are now called, of children in the streets, as in Birmingham, that can neither read nor write, and on cinder hills wherever they have accumulated, and in brickyards, which are unaffected by any of the laws that either restrict labour or enforce education, it would be vain to deny; but of these, many will eventually fall under the operation of either the Factory Act or the Workshops Act; and their present

neglected condition is to be attributed, not so much to the want of schools, as to the employment of mothers from home, and to the general apathy of ignorant parents.

On a recent visit to certain works to which my attention had been called and to which I passed, by several groups of such children playing on cinder hills in the middle of the day, "This, sir," said the employer, "is what wants most "attending to; the idleness of such children, and the "mischief it begets." And so I thought. But the works I was visiting were the sole employment of the town (which sends a member to Parliament) and neighbourhood, and between 60 and 70 women (who were stated to me to work to some extent in a nude state, but they do not, though they are very lightly clad) were employed within them, amongst half-naked husbands, brothers, and relatives, and here and there a stranger, none of these adult males ever going to bed more than once a week and that on Saturday after four o'clock. To these women, (one must have been very near her confinement when I saw them), had been born 107 children) that were at this time between half a year and fifteen years old. And as in many instances both parents were employed within the works, as a matter of course their homes were neglected, and this semi-vagabondage of the families accrued. I mention this as showing one of the classes of outcasts that no Workshops Act can reach, and in illustration of the expression of the employer, "how much it wants attending to, for the mischief it begets."

Of the Factory Act Extension Act, except as to the dividing line of 50 hands between it and workshops, and the employments under it, I can truly say that in my division, so far as I know to the contrary, and so far as my Sub-Inspectors have reported to me, with the exception of letterpress printers, scarcely any modifications of the Act comparatively have been asked for; and that the closing at 7 p.m. by printers and at 6 p.m. by the other trades has been accepted with gratitude by most workers and by many of the masters also.

THE HOURS OF LABOUR REGULATION ACT.

According to your request, that I would endeavour to have the Workshops Act administered, I issued the subjoined circular, together with an abstract of the Act, through the medium of my Sub-Inspectors, to the various local authorities of my district: —

"Labour Regulation Act.

"Sir,

"I desire to call your attention to the requirements of the Labour Regulation Act (30 & 31 Vict., cap. 146), the carry-

ing out of which is entrusted to the local authorities of cities and towns, &c., &c. If no decided steps have been taken by you to enforce the provisions of that Act, I have further to request you to convene a meeting of the members of the town council, or of the Health of Towns Commission, or of other duly authorized committee or board, to consider the measures necessary to forthwith put the Act into operation, and secure the due observance of its several provisions.

"I shall be happy to put myself into communication with any individual, or body of individuals, to whom the details of administering the Act may be entrusted, and to give them the benefit of my experience and advice in effecting the necessary organization.

"I am, Sir,
"Your obedient servant,
"ROBERT BAKER,
"H.M. Inspector of Factories."

and have had numerous and various responses to it. In the vast majority of cases it has not been responded to at all. No doubt many of the local authorities have not yet been discovered by us; some of them I have visited; with others I have corresponded. Many, the sub-inspectors have either seen or corresponded with. At all events, our efforts have neither wanted energy nor publicity. The following are some of the communications that I have received, or the results of personal interviews.

I have called twice upon the mayor of Birmingham, and have also seen the town clerk and the chairman of the General Purposes Committee, to whom and to his committee the corporation have entrusted the question of workshop inspection. I have also furnished the latter gentlemen with all necessary documents to enable him to come to a decision upon it. I have met the mayor and manufacturers of Stafford. I have waited upon the mayor of Newcastle-under-Lyme; the high bailiffs of Stoke and Burslem. I have had interviews with the town clerk of Hanley; and have called upon the town clerk of Southport.

Prestwich, Lancashire.

"It was stated at the board that the works in the district were subject to the inspection of the Inspector of Factories for the district; and it did not appear there was any necessity to put the Labour Regulation Act into operation. The board will be glad to have your views, and to comply with the Act in all respects that may be desirable."

Bolton, Lancashire.

"I am directed to ask for any information or suggestion that you may consider would be of service to us in carrying out the

Act. The sanitary committee some months ago distributed notices amongst employers, but this has not been followed up by systematic inspection."

Dublin.

Mr. Bignold writes : "This is the day on which the Workshops Act Committee sit. I attended and handed your letter, with the Leek register, to Mr. Boyle and Dr. Mapother. It was only last week that Mr. Boyle mentioned, the want of any registration of the hands employed made the supervision of the Act very difficult. The question is whether such registration, not being compulsory under the Act, will be adopted to any extent. There are now 650 workshops in Dublin visited by the inspector. The local authorities are not enforcing the weekly half-holiday."

On this latter point the inspector writes :—

"The Saturday, half-holiday, where there are no children, we do not intend to interfere with, more on account of the wish of the employed, whose wages suffer, than of the employer."

"*Chorley.*

"The commissioners have directed the advertisement you sent to be published in Chorley, and they have also directed their Inspector of Nuisances to see that the above Act is complied with within the limits of the Chorley Improvement Act.

"Robert Jackson,
"Clerk to the Commissioners."

"*Crewkerne.*

"The overseers of this parish request me to acknowledge your letter, and to ask you, in the absence of the Act, whether or not there is anything contained therein imperative on the overseers to convene a meeting of vestry, &c.

"Walter Mumford,
"Assistant Overseer."

"*Burslem.*

"The chairman called attention to the fact that in Tunstall and Burslem the Workshop Regulations Act was a dead letter, as it had not been applied. He regretted that the chief bailiffs of Tunstall and Burslem were not present, as the matter was of great importance, the Act having for its primary object the education of children."

"*Belfast.*

"I duly received your note of yesterday which was laid before the Law Committee of the town council, at a meeting held this day, when we concluded on asking Mr. Cramp to meet that committee on Saturday next at ten, to confer generally on the provisions of the Workshops Act, and the carrying out of the same by our local authorities. I hope the matter is now in training, &c.

"E. H. Thompson."

"*Leighton Buzzard.*

"The Act has been useful here in spite of its imperfections. We used to have 100 children in school in this population of 1,500. Now we have 100 in the upper school and 70 in a new infant school. In any further legislation for our benefit in this neighbourhood the constitution of our plaiting schools must be kept in mind."

The same writer, however, three months afterwards says:—

"I am anxious to know whether there is any prospect of an amendment of the Workshops Act, so as to include the plaiting schools without any manner of doubt. We had closed the plaiting schools in this village and neighbourhood, and we had over 200 children present in our schools in January; but the impression has now gone abroad that the Act cannot be enforced, and, combined with the big boys who have gone to agricultural work, we have lost no less than 60 children, our numbers at present being only 120."

Once more he writes, in April last:—

"With your proposed amendments of the Hours of Labour Act I generally agree; but I would make the following remarks.

"On 3. In the same trade and in the same district the mode of half time should be fixed. Children going to work at the earliest legal age should bring with them a certificate of regular attendance at a certified school of three years at least.

"For instance, here we have straw plaiters and agricultural labourers. The plaiters should not go to work till they are eight years of age, nor then unless they have a certificate of attendance at the infant school for the three last years. From 8 to 13 years of age they should have a certificate of attendance at school during five days in the past week from 9 till 12. Boys should go to work in the fields at 10, and have a five years school certificate. Then they might be allowed to work alternate weeks full time, with certificate of morning and evening attendance at school for five days in the past week.

"On 9. In all country villages the local authority is the parish vestry, who have no funds. They should no doubt appoint an inspector, who would usually be the same man as the assistant overseer; and as he would not have to travel out of the parish, the addition to his salary would be inconsiderable, and might be paid out of the poor rate.

"It is essentially necessary that 'workshop' and 'employer' be so defined as to include places where children are sent by a weekly payment to a mistress who gives no wages to the children she employs, and who receives no profit from their work."

"*Skipton.*

"Your letter was read before the board at their meeting yesterday. I am ordered to read and report on the Act you refer to, and shall be obliged by any information you can give me that may be useful to the board in carrying out the Act."

"*Beds.*

"There has been great delay and difficulty in carrying out the Act in this county. Lace making or straw plaiting is carried on in almost every cottage. I have been the means of circulating your little book amongst the magistracy, clergy, and guardians of this Union, but so far no action has been taken in the matter."

"*Belfast.*

"I duly received your note of yesterday which was laid before the Law Committee of our Town Council at a meeting held this day, when we concluded on asking Mr. Cramp to meet the committee on Saturday next at ten o'clock, to confer generally on the provisions of the Workshops Act, and the carrying out of the same by our local authority. I hope the matter is now in training; and with thanks for your attention, &c.

"*Bilston, Stafford.*

"In reply to yours of the 5th instant, I am not sure that the board will put the Act in force. If they decide on doing so I will lay your letter before them."

"*Birmingham.*

"I am instructed by the General Purposes Committee of the council of this borough, to whom your letter addressed to the mayor has been referred by the council, to request that you will be pleased to favour me, for their information, with copies of the several documents and forms referred to in your communication."
(Sent.)

"*Southport.*

"In reply to your communication respecting the Labour Act, I may say that the authorities here are quite alive to the importance of the subject, and several convictions have taken place for breaches of the Act."

Signed by the Rt. Worshipful the Mayor.

"*Bridgewater.*

"The mayor of Bridgewater desires me to acknowledge the receipt of your communication, and to inform you there will be a meeting of the town council in the early part of next week when the matter shall be submitted for their consideration."

"*Omagh, Ireland.*

"I have to acknowledge receipt of your circular; also sheet of extracts from the Workshops Regulation Act, and to say that same shall be laid before the commissioners at their next meeting."

Answers of a similar nature have also been received from Bideford, Bandon, (Ireland), Bath, Cork, Poole, Ormskirk, Wigan, Magharafelt, (Ireland), Tyldesley with Spaherley, Radcliffe,

Little Bolton, Whitefield, Hanley, Hayle, Nuneaton, Redditch, Willenhall, Newry (Ireland), Northampton, Dunstable, Luton, Newton, Shambrook, High Wycombe, Leicester, Halesowen, Warrington, and many other places.

Such, sir, are some of the communications I have received myself, (but many more have been received by the sub-inspectors,) all having a like tendency, namely, the acceptance of an Act to regulate the hours of work in small workshops, and a willingness to carry it out, with a cautious consideration, however, of the means of doing so, in consequence of either its probable local cost or the trouble which it may occasion the local authorities. I have done everything possible to induce the corporation of Birmingham to take active measures with respect to it, having been appealed to urgently by several of the larger manufacturers to undertake this duty at once myself, irrespective of the council, in consequence of the injurious competition they sustain by the workshops so long as the Act which should regulate them is neither amended nor enforced so far as it may be. And I have been well inclined to do it. But more than once, when on the point of directing the sub-inspectors to commence visitation, I have been stopped by a further communication from the town clerk or from the chairman of the General Purposes Committee, whom I have invariably found anxious to do what they could in their individual capacities, but who, I cannot help imagining, have been controlled by a natural desire on the part of other members of the town council to wait a little longer, and see whether this Act may not be amended, and whether any present expense thus incurred in appointments might not be saved to the local taxation. This languor on the part of the council of so important a borough has certainly prevented any such trial as that, for example, which has been so successful at Leicester, Leek, Dublin, Merthyr, and some other places. At least large numbers of children might have been compelled to attend school, if even the competitive hours of labour could not have been thoroughly restrained.

I will now proceed in a few words to attempt to justify the suggestions which I ventured to make in my last report with respect to certain amendments in the Workshop Act, by the experience which I have since been able to add to that on which those suggestions were founded.

And, 1st, I am still of opinion "that the Bakehouse Act should be repealed." In several parts of my division the largest bakeries are unvisited by any inspector, the local authority having neglected to appoint any officer to that duty.

Since this suggestion was made it has been decided that only those parts of a bakery in which the baking takes place, is exempted from the Factory Act, or Workshops Regulation Act, s. 5. In the matter of large bakeries where several hundreds of persons are employed, this decision rather complicates the case as it formerly stood than otherwise. In some it may happen that whilst numbers of persons are employed on the ground floor, mixing the flour, stamping it and baking it, there being a machine to each oven, but no particular partitions between them, on the upper floors, where there are no ovens, large numbers of young persons may also be employed in sorting the biscuits, placing them in tins, packing them in wooden cases, and sending them off to the railway. Therefore, as these three Acts stand at present, namely, the Bakehouse Act, the Factory Act, 1867, and the Workshops Act, those employers who are on the ground floor come under the Bakehouse Act, and those on the upper floor under either one or other of the other Acts, according as the number of persons employed is under or exceeds 50; whilst, in addition to this, those on any floor who are simply packers come under the 73 sect. of 7 Vict., c. 15, and are altogether exempt from the Factory Acts, at least. Furthermore, whilst those under the Factory Act are limited to the hours of 6 to 6, those under the Workshops Act may be employed between 5 a.m. and 9 p.m. To avoid all this complication and confusion of supervision, for the comfort and convenience of the occupiers, and to enable the educational clauses of the Acts to become operative in such large establishments, I ventured to suggest that the Bakehouse Act should be repealed, by which all such establishments would fall naturally either under the Factory Act or the Workshops Act.

2nd. "That the dividing line of 50 persons between what should constitute a factory and what a workshop, should be reduced to seven persons employed in any handicraft; *i.e.*, that places whether power is employed or not, defined as places of manufacture or handicraft, and whether factories or workshops under either law as it stands, should henceforth, wherever seven persons or upwards are employed, come under the Factory Act, and that all works in which less than seven persons are employed should be deemed workshops, and be inspected by persons appointed by the local authority."

The injustice of the present state of the law is sufficiently self-evident, and requires no argument from me.

"There is an unfairness in this," says a writer in the Stockport Advertiser, "because if the Act is right for 50 is it less right for 30 or 40?"

Then the line between the two classes of works must be drawn somewhere. But it may be asked why at seven? Simply because a manufacturer with 10 employés is considered somebody in his calling; but between employers of 7 and 10 hands there is a sort of hiatus, in which there are neither factory occupiers nor masters of workshops to any extent. Moreover, at seven hands, a large number of petty traders now under the Factory Act, 1867, would be withdrawn therefrom, and be placed under the workshops inspector, if not enough in quantity to be commensurate with the number who have between 7 and 49 "hands," to be thenceafter placed under the Factory Act, yet still sufficient to enable factory supervision to be greatly extended without much addition to the staff, as it now stands.

"I am sure," says Mr. Buller, "I should be very glad, in case of a new Act being passed, if printers and bookbinders were taken out of our Act and put under the Workshops Act, for they cause us an infinite deal of trouble, and really the work is so very petty and useless. It is almost like going into a man's private house. In fact, I am constantly taken through the dwelling houses, and when I come into the printing office perhaps I find one boy, or no boy at all."

Thus also writes a large mercery firm from Lancashire:—

"We hope that it is contemplated by the Government to pass an amended Workshop Act, as at present, those of us who are under the Factory Act are at a great disadvantage, owing to the difficulty there is in enforcing the Workshops Act in its present form."

Another writer observes:—

"But the Factory Act must ever be comparatively a dead letter while employers on a small scale do not come under its restrictions. It is not fair that the employer of more than 50 hands shall be undersold by the man who does not employ that number, as his expenses are heavier in producing his wares.

"What is wanted is one good law to pervade the whole school of labour; one which shall help to educate and raise the generations which are to follow us. I speak as a working man, knowing and seeing daily around me the vast amount of ignorance and misery which press down my fellows."

The consideration of this question, however, involves first, that of the number of workshops, and second, of the number of inspectors for large and small districts; for without some idea of the former we can scarcely arrive at

any accurate conclusion either as to the number of officers that are likely to be needed, or the duties they will have to perform. And after all, as there exist no true data for ascertaining the amount of workshop manufacture, so to speak, much, of any conclusion must be assumed.

An attempt to ascertain the number of workshops in Birmingham, for example, could not fail to be a task of great difficulty and doubt. It is not improbable that Mr. Collings was not far off the mark, when he estimated it on the 7th of April last, as "being very much larger than the "number of factories." As these, at the present moment, amount to 1,379, the total of workshops may perhaps be fairly estimated at 2,000. In some country districts the proportion of workshops to factories would be much larger than this. In Leek, for instance, the number of factories is 46, whilst the workshops within the boundary of the commissioners, which forms about half the union, amount to 234.

Mr. Farrow, my Leek workshops inspector, who is quite *au fait* on such matters, reports to me as follows on this topic:—

"I send you," says he, "a complete list of all the local authorities referred to in the schedule of the Workshops Act within the county (Stafford.) You will remember that the defined boundary of the county is not the same as the registration county. The same may be said of unions and registration districts. Therefore, nothing valuable could ever be given, with respect to the physical, social and educational state of these 243 places. If anything could be done that would enable you to use the 16 registration districts in the registration county of Stafford, you would at once be in the possession of the whole of this valuable information. Or if you could induce the clerk of the union to recommend the several vestries to join together in providing you one inspector for the whole union, there would be a fair chance of success in such union. You must not, however, pass over those vestries where there is a local board, because it frequently happens that the local board only takes a part of a parish or township."

Thus Mr. Farrow assumes that 16 inspectors would be sufficient for the county of Stafford for example; there being many places within it of small comparatively rateable value, which contribute to the aggregate value, in which it may be assumed there would be found few or no workshops to visit. By making the Inspectors' districts registration or union districts, all kinds of local divisions would be included.

Mr. Farrow thus concludes his report:—

"If each registration or union district had a separate Inspector under your control, a generous rivalry would be created throughout the country. In the meantime it strikes me that you would make a good impression by personally visiting the principal place in each district, the same as you did at Leek. A personal interview would be much more likely to set them in motion than a circular."

3d. "That the hours of labour of all children and young persons and the hours of education of children should be the same in both Acts."

With respect to the hours of labour, this is so now in fact, as to the number of hours of work to be performed daily, but not as to the period within which they may be taken. In factories they may be taken between 6 and 6, 7 and 7, or 8 and 8. In workshops they are to be taken by children between 6 a.m. and 8 p.m., and by adolescents and females between 5 a.m. and 9 p.m.

We can thus imagine the discontent and dissatisfaction of the factory occupiers, who are compelled to employ their workers between 6 and 6, with the competition of workshops, wherein there may be employés, some of whom have been turned away from the factories for want of actual age or physical condition, and are at liberty to work between 5 and 9 without supervision, but with the higher rate of wages consequent upon these longer hours.

"Half-time children," says Mr. Farrow, "employed in "workshops, are getting from 40 to 60 per cent. more "wages than half-time children employed in factories at the "same kind of work, on account of the longer hours during "which they may be employed."

"To keep these children" says he "within the period "from 6 a.m. to 8 p.m. would require an Inspector for each "workshop."

But if the regulation of the hours of labour is thus difficult, far more so and vastly more important is it with respect to the hours of education.

I will quote the authority of Messrs. Brough and Nicholson, large silk manufacturers at Leek, in proof of this:

"As employers of labour," say they, "under the Factory Act, we beg to call your attention to the discrepancy between the Workshops Act and Factory Act in the hours of work and the time required to be spent at school as half-timers."

"The Workshops Act enforces 10 hours at school in each week, but we find that this 10 hours is often completed on Monday and Tuesday, five hours each day; and the child is then at work

the rest of the week, or four full days; while the Factory Act compels the child to be at school five half days in each week, that is, five mornings or five afternoons. We are anxious to carry out the Factory Act in its integrity, but we find a difficulty in impressing upon the parents the necessity of regularity of attendance at school for five half days; for they cannot or will not see why we cannot permit the same latitude as to time at school and work, as the employers under the Workshops Act. If the Acts can be assimilated as to the hours a child may be permitted to work, and if all certificates of school attendance be made out on the principle of those under the Factory Act, we think it would be better for all concerned; and by removing existing anomalies enable us to carry out to the fullest extent the provisions of the Act."

The manager of the Leek British school also writes:—

"The managers of the Leek British school are deeply impressed with the importance of assimilating the Workshops Regulation Act to the Factory Act, in respect of the attendance of the children at school day by day. It is found that the present system of making the requisite number of hours at school rindug the week is on many accounts objectionable. It occasions much irregularity. It is the cause of great confusion in the classes, and is a hindrance to the progress of the scholars themselves; while at the same time it is a source of jealousy and discontent among those who are subject to the more specific regulations of the Factory Act. I have been requested therefore to communicate with you, and convey to you the unanimous desire of the committee of management that steps should be taken to require the children belonging to 'workshops' to attend school as half-timers that is to say, $2\frac{1}{2}$ hours each day."

I have received a similar letter from the gentleman who superintends the affairs of the Wesleyan body in Leek. Him I saw when last at Leek, and also the vicar. They both complained of the same irregularity of school attendance, and declared that, unless it could be rectified, they should be obliged to direct their schools to be closed against the children. So great indeed was it, that they foresaw an interruption to the school grants from Government in consequence; and this they were determined to avoid even at the cost of shutting the schools against all half-timers.

My anxiety, in addition to the loss of school accommodation for the half-timers by this method of self-defence among the school managers at Leek, and for which indeed they are not to be blamed, is, lest this 10 hours a week principle should become epidemic and spread to the textile districts; for if it once gets introduced amongst them we may look for similar results. We shall then sustain probably a loss of the present half-day system, or find the adoption of schools for factory workers special, which would subvert the present

generous feeling of equality existing in these schools, where workers and non-workers are assembled together at the same desks and on the same lessons. It seems to me necessary therefore that, the evil of an attendance at school weekly and not daily, and a few other matters connected with education in the Workshops Act, such as the production of the school certificate only to the Inspector or Sub-Inspector of Factories, and not also to the justices, or any authorized person, and that of 13 days' trial at work before the commencement of school attendance, should be met by an enactment which should render all half-time attendance at school taught by a certificated master or mistress daily, and not weekly, but neither for two hours nor three hours fixed by law, but according to the daily attendance of any such school to which the children may be sent. In schools not kept by a certificated master or mistress, an attendance of not less than 2½ hours daily, except on Saturday and Sunday, morning or afternoon, should be required. As the question of education for agricultural children is also under consideration, I beg to append a report from a national schoolmaster in Warwickshire on that of a population partly industrial and partly agricultural, which may be read with interest, though it does not suggest peripatetic teaching in the winter, which appears to be so well calculated to overcome the difficulty of teaching where there are no schools within some miles of the population.

"I. The Condition of Education in this Locality (Evesham).

"I have been in charge of this school for five years, and from my observation and experience during that time, I am of opinion that there is a deplorable amount of ignorance amongst the children of the labouring classes in this neighbourhood. I remember being very much struck with this ignorance when I first came here, and having had the superintendence of the night school for several winters, I have become very strongly impressed with the conviction that our present educational appliances are quite inadequate to cope with the appalling ignorance and moral destitution so prevalent in this locality. In the night school the instruction of nearly two thirds did not rise above the bare requirements of the 1st standard; none were presented above the 3rd standard; whilst one-third of the whole had to be presented in the same standard in which they were examined in the preceding year.

"II. The chief Causes of this defective State of Education.

"1. *The early age at which children leave school for work.*

"Year by year our registers point out the sad fact that the average age of the highest class becomes lower. So early do

most children leave that a very few weeks suffices to efface the instruction which has been imparted to them during the year or two they have spent at school; and when they turn up again in the Sunday or night school it is truly pitiable to see the condition to which they have degraded. I have analysed the list of those who left the day school in one year, and find that, with an average of 62, no less than 36 boys left for work who had not passed the 4th standard; and of this number only seven had passed the 3rd standard.

"2. *The irregular attendance of those who are nominally scholars.*

"Not only does the cause of primary education suffer from the early removal children, but also from the constant interruptions by which their attendance is broken whilst nominally at school. This irregularity is the result of two causes:—

"(1.) *The employment of children in the gardens.*

"During the winter months, *i.e.* from about the middle of September to about the middle of February, our attendance is nearly double what it is during the rest of the year. In the spring, earlier or later, according to the mildness or severity of the weather, children ranging through all the standards, *i.e.* from 6 years of age and upwards, are sent into the gardens, "bird-minding;' and with perhaps the exception of a few weeks' schooling during bad weather, are kept there at the various operations of radish tying, pea picking, potato gathering, &c., until the end of autumn, when they return to school in a most lamentable state, utterly demoralized by contact with their elders in age and wickedness; all ideas of discipline scattered to the winds; and the instruction which had cost so much pains and labour to impart during the winter months absolutely lost.

"The following extracts selected from the school log book will put this more forcibly:—

"'1867, May 21, C. G. returned after six weeks absence.'

"'Sept. 5, G. C. away again, in stand. 2; he only came back last week after 12 weeks absence.'

"'Sept. 16, M. H. returned after 9 weeks absence. He only returned in May after 8 weeks previous absence. J. R. returned after 23 weeks absence.'

"'1868, Aug. 17, E. S. returned after an absence of 7 weeks; he was a very backward boy in stand. 4.'

"'Aug. 25, W. P. has returned after 10 weeks absence.'

"'Sept. 28, T. B. in the 3rd stand., has returned after an absence of 22 weeks. He had nearly made the 200 attendances before he went out to work, and was pretty well up in the work of his stand.; now he can do nothing, and it is a hopeless task to prepare him for the examination.'

"'Sep. 29, J. D. in the second stand. has come back to-day. He has been absent for 13 weeks.'

"'1869, Jan. 26. There are several boys in the 2nd stand., and who have only just come out of the infant school, out bird-minding.'

"'April 19, C. B. came back to day after 12 weeks absence.'
" E. H. " 11 "
" F. B. " 8 "

"'April 26, C. J. came back after 16 weeks continuous absence, excepting a few attendances during a fortnight of that time.'

"'E.G. came back after 16 weeks continuous absence.'
W.B. " 10 "

"These are but specimens of many such like entries.

"Again, in the year alluded to above, in the day school there were only 66 who had attended 200 times and upwards, whilst 91 had been in attendance less than 200 times; and the average number of attendances made by each child during that year was only 172. But the school was open 432 times, hence the children here on an average do not attend school much more than about *one third* of their time. Nor is it any better in the night school, where, out of 66 names on the books, only 26 attended for 24 nights; thus leaving 40 who had not come up to the very moderate minimum of attendances required by the Government. In the girls' school in the same year there were 67 who had attended 200 times, and 120 who had fallen short of that number. In the infants' school there were 72 who had made 200 attendances, whilst 68 had made less. In the adjoining parish of Bengeworth, in the mixed school there, 124 had attended 200 times, but 177 had attended less than 200.

"(2.) *The carelessness and caprice of parents.*

"This is another fruitful source of bad attendance, and occasions a different kind of irregularity, viz., uncertain desultory attendance, as contrasted with the prolonged and fixed absence of those out at work. It is astonishing, and would seem almost incredible to those unacquainted with the matter, how small a thing suffices with so many parents to keep their children away from school. Perhaps the teacher has been too strict, or not strict enough; he may have set them too many lessons, or none at all; there may be a show, a fair, a funeral, or a meet of the hounds; it may be a wet day or threatening for one; anything, no matter how trifling or absurd, will do as an excuse for not going to school. In fact such children as these go or stay away almost as they please. Here one day, and away the next two; thus their attendance is frittered away. How then can we make any abiding impression on them? How can we teach them anything? As fast as we pour in at school it leaks away out of school. Thus they become a continual source of irritation and annoyance to the teacher in his endeavours to keep them on a par with those who are rarely absent; and leave school with a mere smattering of instruction, which after a few months is utterly lost. Nor should I omit to mention here the pernicious influence which the drunken habits of many parents exercise upon the attendance of their children. Week after week we have scholars absent for no other reason

than that their parents having spent their wages in drunkenness have no means of furnishing the necessary school fees ; and this in the case of some earning from 20*s.* to 30*s.* per week. Many more would be absent for this reason were it not that private benevolence furnishes the means for that education from which the drink-caused poverty of their parents would otherwise debar them."

III. The Remedy suggested.

"I have no hope of amendment but in some form of compulsory attendance ; *direct* compulsion in the case of those neither at work nor at school, and *indirect* in dealing with those who are out at work. There are many forms of indirect compulsion, but the most efficient in my estimation would be, not to allow any child to be sent out to work under ten years of age, and not then unless the parents can produce a certificate, from a properly qualified officer, of the child's ability to pass the 4th standard. This plan would have the double advantage of giving the instruction of the schoolroom a direct money value in the estimation of the parents, whilst it would effectually secure the co-operation of their employers by making a certain amount of instruction the passport to employments.

" Geo. S. Barker.

" National School, Evesham."

With respect to that class of children in communities, who are never at school, children that never work, or are the offspring of ignorant or apathetic parents, how readily these workshop inspectors could obtain much valuable information ; and point out in what direction the efforts of the philanthropist might be best engaged, and with the least possible loss of time. Or, they might direct the attention of local authorities to a variety of insocial and insanitary matters difficult to discover without their assistance. In one of his letters to me Mr. Farrows observes :—" In addition to the " 198 children sent to school under the Workshops Act, I " estimate there are at least 100 more children in Leek, " principally belonging to that class of the community who " supply the inmates of workhouses and prisons, who ought " to come under some educational provision."

Again, in writing on the results of his efforts, he says :—

"A short time since it was stated that no difficulties had arisen in carrying into effect sanitary laws. And upon examining their experience, I discovered that the mean age of death of their population was under 20 years: while elsewhere, where all manner of difficulties arose, the mean age of death was above 30 years. In testing the administration of the Workshops Act by the same rule the results will be found to be very much the same. Macclesfield and Congleton are silk manufacturing towns. Not a single complaint or difficulty is heard from them

with respect to the Workshops Act; whereas at Leek I am beset with difficulties. In Macclesfield I cannot hear of a single child being sent to school under it. In Leek we have nearly 200. And these difficulties prevent me sending a considerable number who most need moral and intellectual training. If the intentions of the Legislature are to be carried out, this wooden Act will have to be amended."

"I send you," says he, "the school certificates for one week. I have sent an additional number of children to schools from both workshops and factories. I have applications from Derby, Sunderland, Ashbourn, Stockport, Macclesfield, Hanley, and Blackburn, asking me what is the best course to pursue in the workshops business? I believe the people in general are not opposed to the Act. They do not begin simply because they do not understand how to begin. The following story is truthfully illustrative of the apathy and ignorance of parents:

"On Wednesday last I was out in the country among the brickyards. By the roadside stood the parish boundary post, on my side of which stood a gipsies' tent. The establishment consisted of a number of men, women, and children, engaged in the manufacture of toasting forks and clothes pegs. Three of the children were under 12 years of age. I explained the Workshops Act to them, and stated that I should come again on the following Monday to inspect the school certificates. To-day, this manufacturer came to me, and coolly informed me that I need not go for the school certificates, for they had removed beyond the 'educational post'; meaning that they had passed over into another jurisdiction."

Writing on another occasion Mr. Farrow says, "The "incumbent of St. Luke's desires me to state that 92 half-"time children attend his schools from workshops, and that "the irregular manner in which they attend causes much "confusion and inconvenience. And he sincerely hopes you "will see the necessity of making the same arrangements as "those made with respect to the attendance of children "from factories." A marked improvement, he says, "is "observed in the children, and he should be sorry to be "compelled to close his school against them."

I regard this irregular attendance at school as a matter of the first importance. Children are not usually voluntary attenders at school from places of work, and they readily reply with the apothegm when spoken to, "If two days a week are sufficient attendance for a workshop worker, why should a factory worker be required to attend five days a week?" The school inspector for the Leek district has already confirmed to me the danger of the loss of school grants by the want of quality in the general education in these Leek schools, in consequence of this irregular attendance. The matter would be indeed serious everywhere if, from this

cause, all the national schools were to be closed against short-time workers, for then the great purposes of the Factory Acts would be frustrated. And yet this seems an almost certain sequence of any recommendation to legalize so many hours attendance a week, and not so many hours attendance every day.

4th. "That par. 4, sect. 6, should be altered, so as really to "prevent Sunday work." At present, it may be read as follows: "No child, young person, or woman shall be em- "ployed in any handicraft, on any Sunday or after two "o'clock on Saturday, except, &c., &c."

5th. "Sect. 9 should be repealed, which requires a person "to make a complaint before a justice, in order to obtain the "right of entry into a workshop." This want of power of entry, without the preliminary form of obtaining an order from a justice, applies alike to workshop inspectors as to any person volunteering a complaint; and it has been found objectionable in several cases where otherwise active measures would have been taken, from the mere trouble and responsibility attending upon it; and in some from the fear of consequences.

"I regret," says one writer, "that the local authority "has not the power which the factory inspectors possess of "on all occasions entering workshops. This defect in the "Act will, I hope, soon be remedied."

6th. "That after the word therein in sect. 10, the follow- "ing words should be added, namely, "And take such steps "as he may deem advisable for enforcing the provisions of "this Act, under the powers of the Factory Acts or any of "them, so as to enable the inspector of factories to control "and direct the workshop inspector in the discharge of his "duties."

My hope is, that under some such words, the powers of the Factory Act, 1844, especially with respect to the right of entry into a workshop at any time when the people are at work, as well as all the other needful powers to carry out this Act fully, would be obtained.

The importance of both the Factory Act and the Workshop Act being carried out equally under the same discipline can scarcely be overrated.

Mr. Sub-Inspector Bowling on this power of entry, says:—

"As touching upon the question raised in my letter of the 8th inst., whether local authorities have any power to appoint an inspecting officer under the Workshops Regulation Act, I was at Cadishead yesterday, and ascertained that a sergeant of police from Patrickcroft had been making a round of the workshops in

that district, and had threatened a good many of them whom he had found working illegally. I am told that the people are simply laughing at him, and declare that if he comes again they will ask him to produce his order, and if he has not got it they will kick him out. In order to evade the Act, the Cadishead people have for several months past, set up fustian cutting frames in the children's homes, with the consent of their parents, at which they work all hours. As the employers in such case have no 'right of access or control,' over the house of the child's parents, it is doubtful whether that house could be considered a workshop."

9. "That the local authorities should appoint workshops inspectors, and pay their salaries out of the rates, in proportion to the number of workshops in each district and the miles to be travelled. That in case of no such appointment being made within three months of the passing of the Act, then, on the report of the Inspector of Factories for the division, the Secretary of State should appoint, and that on appointment, the inspector of workshops should be subject to the sole control and direction of the inspector of factories, and not the local authority."

It may be asked, why should the appointment of workshops inspectors rest with the local authority, and not with the Secretary of State? Why should not the same authority which appoints sub-inspectors of factories, appoint workshops inspectors? These questions, at first sight, do not seem very easy to answer, since the appointments made by either appointor appear to answer well. We have, I believe, an example in the appointment of the Registrars of Births, which are made locally, but as soon as they are made, the appointees become subject to the direction and control of the Registrar General.

There is something, however, in the kind of men to be appointed, and the locality they are to supervise, and the manner, habits, and customs of the people they are about to deal with, which is worth consideration; and whether the local authorities are not likely to be the best judges of the special qualifications required under these circumstances is a matter worth consideration. Local men may be supposed to be best cognizant of localities which in large districts would be a maze for years to a stranger. Generally, it is not considered wise or expedient to introduce the police so far into civil life and occupations, as to make them workshops inspectors. But there may be districts where their presence would be unobjectionable, and where, from their "beats" being already recognized, the extra duty of inspecting workshops would be more easily performed by them than by anybody else.

There are some places I believe where it would be difficult to find any other persons so well fitted for the duty. And if the ratepayers are to pay for the kind of supervision that the present Act enforces on them, then it seems but reasonable that the patronage should rest with those who represent them locally.

The general unwillingness, however, of local authorities to take any trouble in the matter, the indifference with which inspection is regarded, on account of the danger of its local cost,—the delay occasioned by certain even corporate bodies, as at Macclesfield for example, which only meets once in three months, the number of these bodies generally, and the diversity of opinions which they entertain on all social and intellectual questions, render it absolutely necessary that a power should be invested in the Secretary of State to appoint workshops inspectors within a given time, where local authorities do not, even though their salaries and expenses are to be paid out of the local rates. These salaries and expenses are really the stalking horse of the whole question. Any local authority would be glad enough to appoint inspectors and put the Act in operation at once, if only the Government consented to pay the cost. They never seem to consider that the education of the people more than compensates them for the punishment of crime; and, even if there is no crime, that the superior intelligence of an industrious class of artisans, their constant employment, and the distribution of higher wages in consequence, restores the balance of cost in favour of the rateable value of property, and against the leakage in it arising out of the drunken and immoral habits of the same class of people whose education has been neglected. To the question why when appointed, no matter whom may be the appointor, should the workshop inspector be subjected to the control of the Inspector of Factories? the answer is obvious; and it is that, as many local authorities contain amongst their number the very persons whose works would be subject to his supervision, who would pay him his salary, and, in fact, be his master, he could never act sufficiently independently of them without the fear of losing both his office and its emoluments. As a local authority, a manufacturer, once said to me, "We have given "all our officials notice that if ever any of them give you any "information about our workshops, they shall be dismissed "instantly." So it would be next to impossible for any inspector so appointed to discharge his duties conscientiously. But placed under the control of the Inspector of Factories, and with the powers and provisions of entry, &c.,

&c., confided to him under his direction, the independence of any man, however locally circumstanced, would remain to him, and the duty would be discharged. In this way only could the discipline of the workshop become uniform with actories.

Against the appointment of workshops inspectors by local authorities a great deal has been both said and written. The following is perhaps as piquant as anything:—

"The local authority is entrusted with the Act, and the expense of carrying it out, I believe. Suppose the Act adopted. Whom will the vast and collective wisdom of our town council summon to do the work? Some one cheap and inefficient in these high rating days; and I am sure if "cheap," it will be worthless. It is no exalted scavenger dubbed policeman that is fit for it; nor is it a proper office for a nuisance inspector. Even though, in either case, generosity and appreciation extends the length of a few shillings extra pay for the work, I venture to say there is not a man in either 'department' whom these few shillings extra pay would not induce an extra smartness for the nonce, and instil into his expanding bosom a fitting pomposity equal to his estimate of the important services he would be rendering to the state. I fear we have town councillors who like doing the 'cheap'—who would consider his especial favourite or relative 'just t' mon for t' job'—(need the channel fleet want a commander on short notice?)

"Our 'local authority' is therefore powerless to make this useful Act a silly travestie or a genuine living reality—a boon, a blessing. What will they do? It will be admitted that the 'Factory Act' has become agreeable and successful in its operation, mainly through working it by gentlemen who have by examination to prove their fitness for the duty; and I must in fairness say no scandal has yet tainted them. *A fortiori*, if this Act, minor though it be, is not worked by similar means, it will prove a disastrous nuisance.

"There is a fitness and a propriety in order to attain success. In the senior Act, as I will call it, we have associated, first, the inspector, then we have as his colleague a medical man—both educated and discriminating. What an incongruity to introduce the 'staff.' It won't work, nor can all the spurious cheapness of the moment long tolerate the absurdity. What is wanted is an inspector with judgment and discretion—his is the office—with him alone rests a blessing or a curse. Parliament has provided and permitted a duty—and that duty is a sacred one—a duty sacred for the future rather than the present. His is the care of the young. Shall ignorance and its surroundings further engulf us in poverty and crime? Shall innocence be contaminated still? Will an attenuated frame, a sunken eye, betray our indifference? Shall weakness preach to us, or shall we proclaim to the world that work, and only work, animates us?—greed, only greed, our idol? More fills my heart, and would guide my pen—but enough.

"Very truly yours,
ONE INTERESTED."

Only two or three other topics remain to be touched upon, and these are with respect to milliners and dressmakers, ventilation of workrooms, and the keeping of a register.

The workshop inspectors whom I know say, it is absolutely necessary that, in all workshops there should be a register in which are combined all the facts needful to be kept. I gave the contents of such a register in my last report. Among other things, there is an abstract always ready at hand, which is far better and less expensive to the government than abstracts printed and circulated at the public cost, which are never or rarely read, and seldom understood. Mr. Farrow showed in my last report ample reasons for the adoption of this register, which have been confirmed by further experience. The inspector of workshops for Dublin, who appears to have entered on his work also *con amore*, thus speaks of this difficulty :—

"As far as this city is concerned, speaking of the regis-
" tration of hands," he says "I believe that the register of
" those in their employment will be filled up by the majority
" of employers, but there will of course be many who will
" not do so. I regret that the Act should not render this
" compulsory."

Mr. Sub-Inspector Bignold also recently writes of Dublin,

"This is the day on which the Workshops Act Committee sit. I attended and handed in your letter, with the Leek register, &c. It was only last week that Mr. Boyle, the workshops inspector mentioned the want of any registration of the persons employed made the supervision of the Workshops Act very difficult. The question is whether such registration, not being compulsory under the Act, will be adopted to any extent."

Then as to ventilation of workshops, many of them, as may be supposed, are very much crowded and unhealthy for the want of it. In some I should think scarcely 100 cubic feet of room are allowed per person, much less the necessary 600; and I have in vain offered, through the kind proposal of an inventor, to have two or three of the worst of them ventilated without cost to the occupier upon a principle which appears to me to offer the happiest conditions of success. The old method of purifying the air of workrooms by open skylights, windows, and perforations, which the workers close in cold weather against every remonstrance, is apparently to be maintained at all hazards, and I am bound to say that the plea by the workers of closing those apertures because of the cold draughts that arise from them is well founded. But I believe Mr. Pott's plan (that which I have suggested) would have effected, if not everything that could be desired in the way of

ventilation, as much as under the circumstances, as could have been obtained.

I have issued the following circular to the sub-inspectors and certifying surgeons in my district with respect to this subject:

"The minimum quantity of air necessary for health in workshops is 2,000 feet per hour. Even this allowance, if many are employed in the same space, is insufficient, as with it the carbonic acid will accumulate to 5 or 1·16 per 1,000 values, the normal amount being 4 per 1,000. If gas lamps or candles be burnt in the same shop, unless special ventilation, and products of combustion be at once removed by special provisions, 3 cubic feet of air are consumed per hour for each gaslight or for each pound of oil or tallow consumed. Such are the established rules. Of cubic space of air for each man, not less than 500 cubic feet is necessary. The army standard is 600. This 500 or 600 feet must be changed twice at least every hour. If organic impurities, dust, or gases are given off in a workshop, then the cubic supply must be increased, and also its circulation or rate of charge."

As to milliners and dressmakers, the applications made to me by the employés for protective interference have been rather numerous: almost all anonymous: many, under erroneous impressions as to the hours of work, referring to the commencing and closing hours of the Factory Act. Some of the complaints have been, of employment during the night; frequently, of over hours, and of indifferent food. I have myself visited many of these establishments in Leamington and Birmingham, and have occasionally found overwork, which has ceased on my remonstrance. Some of the rooms in which the girls work, are light, airy, and comfortable. Some are small bedrooms only, up five or six pair of stairs. I have, however, not found so many cases of such excessive labour as the public is led to believe. There is an earnest desire on the part of the workers to be at liberty after 8 p.m., and there is a stronger desire, if possible, on the part of the employers, in cases of marriages, or where mourning is urgently required, that overtime should be allowed. They say "the difficulty of demand and supply is not to be met by the sudden introduction of other hands." Generally I have had no occasion to repeat any visit that I have made, from a wilful determination on the part of the employers to evade the law. My visits have been more explanatory than official, though in one case, where all the employés lodged in the house of the millineress, she told me herself that she could afford to keep no job hands to sit and look at one another, nor should she, whatever the law might be. This case presented I suppose as many difficulties in dealing with it as

any case could do under restrictive legislation. The workers, seven of them, were in the house, lodging and boarding with the superior, a lady in a peculiar line of business, and full of it. These girls were required by law to work no more hours than 10½ between 5 a.m. and 9 p.m., and to have an hour and a half for meals, but not to work after 2 p.m. on Saturdays. Supposing them to commence at 6 a.m., as they stated they did, and to cease work at 8 p.m., and to have four meals a day at an irregular time for each, who was to measure these hours into 10½ work and 1½ meals preparatory to a conviction for over work? But supposing there to be no complaint of overwork, and no practice of it, by what right should we say that having worked the legal hours for the mistress, after that, all seven should immediately go to bed, go out, or sit with their hands before them from 8 p.m. to any hour that they either collectively or individually chose to sit up. If they were found working after 8 p.m. the connivance would not be easily proved as against the employer upon whom their daily bread depended, whether such overwork was either voluntary or enforced.

In all such complaints too it is necessary to guard against being made the instrument of gratifying any revengeful feeling by offended or dismissed workers, who are apt to colour up acts into injuries, which could not be proved to be such in a court of justice. I mention these circumstances to show the difficulties of this question in certain phases of it. In workrooms where they come and go, to labour and meals regularly, these difficulties do not present themselves so forcibly. That overwork does exist now and then to a great extent in millinery and dressmaking is I believe true, but I am led to think, from what I have seen, that it is in its decadence, and that in a short time it will cease without any serious interference.

One great difficulty of applying the Act, namely, that of retaining the invaluable plan of securing the age and physical condition of the workers in these small workshops, is overcome by the column in Mr. Farrow's register for the signature of the factory certifying surgeon whenever he may be called in by the workshops inspector either to certify the age or the health of the employé. The expense of a regular visitation by the surgeon is thus avoided; but the benefits to be effected from it, as in the case of factories, are retained.

I trust, sir, that in these few pages I have justified in your opinion my former suggestion of amendments. I have at least given the whole subject my best consideration, and append the facts for yours.

I have to add that a person in Birmingham, of the name of Smith, lately assumed the character of a sub-inspector, and entered the premises of one of the manufacturers. "He had gone through part of the works," says Mr. Johnston, "when the occupier declined to let him go further, to whom he said that he should hear about it again, and left." Smith was subsequently discovered, and had before the magistrates, when he was fined 5*s.* for being drunk and let off the more serious punishment.

The following is a report by Mr. Sub-Inspector BEADON on the truck system in Devon. I am afraid the same system prevails in parts of the Black Country.

"EXISTENCE of the TRUCK SYSTEM at Ringwood.

"MY DEAR SIR, 29th June.

"WHEN I paid my first visit to Ringwood I reported to you that I received information which seemed to point very clearly to the existence of the 'truck system.' in its most objectionable form.

"Having now had more time to investigate the matter, I regret to say I find that it is perfectly true. Ringwood has long been the seat of manufacture for a peculiar kind of knitted glove in various materials.

"This seems to have declined very considerably of late, but it is fortunate that the excellent establishment lately started by Messrs. Jno. White and Co., for the manufacture of collars, cuffs, &c., has now opened a door for lucrative employment for much of the labour thrown on the market by the decline of the gloving work.

"It is in the payment of the gloving hands that the objectionable truck system still exists. They are not paid in money for the work they bring in to their employers (which is done at their own homes), but are compelled without any option to take out the estimated value of their work in goods, chiefly drapery and grocery. Now, although these are very useful and necessary in their way, still it is obvious that in a labourer's home a very small supply suffices, and the cupboard might very quickly become overfull.

"The pernicious and cruel results of the system tell against the poor workers at every point.

"When they wish for money they are obliged to make a tour of inquiry among their friends to ascertain who wants any goods, such as they have to take, and they then carry in their work to their employers, and are able to say what they will take instead of wages. Thus there is not only a vast amount of unnecessary trouble and loss of time in ascertaining what is wanted, that they may know where to turn it into money; but, as a matter of course, they are expected to dispose of everything at a reduction of price, even on the value at which it was rendered to them, and I need hardly point out the strong probability that the quality of

the goods which they are made to take would not be exactly commensurate with the value set upon them by their employers. Thus, as I said, the unfortunate worker has to suffer loss of time, loss of value, and all the other great inconveniences of this pernicious and demoralizing system, against which public opinion and, if I mistake not, the laws of the land, have long so decidedly spoken.

"As an evidence of the rigidity and deeprootedness of the custom, I may mention that I am credibly informed that some of the leading employers of this labour (who happen to be drapers for instance) have established a grocery counter solely for the payment 'in kind' of their gloving hands; but from which they do not profess to sell to the public.

"I have considered it my duty to point out and report to you upon this matter, deeming it to be one of those numerous collateral branches of inquiry which come within our scope of useful endeavour, to be dealt with by remonstrance, or the moral influence of public animadversion, as you may see fit.

"I am, &c.

"Robt. Baker, Esq." W. H. Beadon,

"Sub-inspector of Factories."

Report from Mr. Sub-Inspector Beadon.

Workshops Regulation Act.

"Sir,

"In accordance with your instructions, I beg to hand you the following statement of the general results of my endeavours to induce the local authorities in my district to put the above act in force within their jurisdictions. The time being limited, and my district a wide one, I have directed my attention chiefly to the more important towns, such as Portsmouth, Portsea, &c. Southampton, Exeter, Plymouth, Stonehouse, and Devonport, and a few others of less importance. As there has yet hardly been time to get matters to a very advanced stage, I need not now trouble you with details of the results at each place, more especially as there would be almost identical accounts to give of each.

"In a general way, then, I will state that, with one or two trifling exceptions hereafter mentioned, all the authorities have provisionally consented to take the matter into serious consideration, and are at this time arrived at various stages, depending on the dates when I drew their attention to it, the time for their various meetings, and other circumstances. Some have appointed committees to investigate the subject, and confer with me (or yourself), &c. Some have already issued handbills or abstracts, so that by degrees there is probability of the Act being put in force in most of my places. In a few months time I shall, I hope, be in a position to report satisfactory progress both in my large and smaller towns. I have all the details of what I have done in each case should you desire to have them.

"The exceptions to which I refer above are the towns of Poole and Stonehouse, where resolutions have been passed to the effect that they do not feel called upon to adopt the Act; but I think that neither of these will persist in this course of inaction, more especially the latter, which is so intimately mixed up with Plymouth and Devonport, where the authorities are in a fair way to do their duty, so that the contrast, so close at hand, would be unfavourable to Stonehouse.

"While it is but fair that this, the only power the law at present has, should be used to control, to some extent, establishments competing, more or less, with others which have to conform to the Factory Acts, I cannot refrain from once more expressing my opinion that the less stringent provisions of the Workshops Act, if considered as final, would constitute a very inefficient engine for the purpose, and that the glaring inequalities and injustice presented by the want of conformity between the two Acts call for immediate correction by legislation.

"I have, &c.

"Robt. Baker, Esq." "W. H. Beadon."

"Leicester,

"Dear Sir, "5th July 1869.

"I have visited most of the chief towns this week and urged the Workshops Act on their notice, and have promises that it shall be set in operation. I am going to see 'the clergyman's' workshops near Thrapstone, also to Northampton. The Workshops Act is very imperfect, and as school certificates need only be kept for one month, it would require constant visiting by some one to keep them in order. Surely it will be amended and give power to the local officer to demand the certificates? There are thousands of workshops all over my four counties, without any exaggeration, and it would be quite impossible for us to see after them without very great travelling expenses.

"Hosiery, boots, and shoes, lace and straw plait exist in almost every village.

"I am, &c.

"Charles N. Girardot."

Workshops visited by Mr. Faussitt.

Maryport, Cumberland.—Board of Trustees: J. P. Senhouse, Esq., Netherall, Chairman.—Nothing has been done here towards carrying out the Act.

Brampton, Cumberland.—Board of Guardians: G. Ramshay, Esq., Clerk.—Ditto.

Alston, Cumberland.—The Vestry.—Ditto.

Ulverston, Lancashire.—The Vestry: Thomas Postlethwaite, Esq., Clerk.—Ditto.

Keswick, Cumberland.—Local Board: Major Green Thompson, The Hollies, Keswick, Chairman.—Ditto.

Workington, Cumberland.—Local Government Board: Mr. Askew, Clerk.—Ditto.

Wigton, Cumberland.—Board of Guardians of the Wigton Union.—Ditto.

Carlisle.—Mayor and Corporation, the Town Clerk.—Ditto.

Penrith, Cumberland.—Local Board of Health: C. Fairer, Esq., Clerk.—Ditto.

Cockermouth, Cumberland.—Local Board: Mr. Hird, Chairman.—Ditto.

Blackpool, Lancashire.—Local Board of Health: Wm. Henry Cocker, Esquire, Blackpool, Chairman.—Ditto.

Barrow-in-Furness, Lancashire.—Mayor and Corporation: Wm. Thos. Manclarke, Esq., Town Clerk.—Ditto.

Kendal, Westmoreland.—Mayor and Corporation: Thomas Harrison, Esq., Town Clerk.—Beyond issuing printed copies of the Act, no steps have been taken.

Whitehaven, Cumberland.—Town and Harbour Trustees: Wm. Partson, Esq., Chairman.—No steps taken.

Preston, Lancashire.—Mayor and Corporation: Robert Ashcroft, Esq., Town Clerk.—No steps have been taken to enforce the Act.

Chorley, Lancashire.—Local Board: J. M. Rigby, Esq., High Street, Officer of Health.—Ditto.

Lancashire.—Local Board of Health: Mr. Rd. Bond, Clerk (to above), New Street.—Beyond posting abstracts of the Act, no steps have been taken.

Fleetwood, Lancashire.—Improvement Commissioners: Mr. Isaac Stanley, Clerk, Dock Street.—Nothing has been done here.

"Stockport,
"14th June 1869.

"Dear Sir,

"I have communicated with all the principal local authorities in my division (21 in number), enclosing abstract, circular, and a manuscript letter, on the 10th, 11th, 12th June.

"I have already received replies from several (4) promising to bring the subject under the notice of their respective Boards at their next meeting.

"I am, &c.,
"Thomas Steen.

"Robert Baker, Esq.,
10, Whitehall."

Workshops Regulation Act.

Sub-Division of Mr. R. C. Bowling, South Lancashire.

Liverpool.—Borough, Mayor, &c.: Town Clerk of Liverpool. —Act adopted, Dr. Trench, Medical Officer to Board of Health, to carry it out.

Warrington.—Borough: Thos. Geddes, Esq., Town Clerk, Warrington.—Adopted. Inspector of Nuisances to put law in force.

Wigan.—Borough: Town Clerk, Wigan.—Nothing done.

Ormskirk.—"Local Board of Health:" Wm. Welsby, Esq., Clerk, Ormskirk.—Nothing done.

Southport.—Borough: C. S. Goodman, Esq., Town Clerk, Southport.—Adopted and put in force. Penalties have been inflicted.

Ashton in Makerfield.—Board of Highway : Sir R. T. Gerard, Bart., New Hall, Chairman.—Nothing done.

St. Helen's.—Borough : E. P. Cearns, Esq., Town Clerk, St. Helen's.—Nothing done yet ; St. Helen's only lately incorporated.

Cadishead.—Board of Guardians : Mr. Whitworth, Clerk, Patricroft, near Manchester.—Adopted, but not yet in force.

Runcorn. — Improvement Commissioners : Chas. Hayhurst, Esq., Chairman, Runcorn.—Nothing done.

Prescot.—Local Board : I. Galloway, Esq., Solicitor, Chairman, Prescot.—Nothing done,

Garston near Liverpool.—Local Board of Health : The Chairman or Clerk, Garston.—Nothing done.

"Belfast,

"Sir, "7th July 1869.

"A few weeks ago you requested me to look up the 'local authorities' of my sub-division and to urge them to carry out the 'Workshops Regulation Act.'

"Sufficient time has not yet elapsed for me to report much progress, but a very fair start has been made. At the end of May I sent abstracts of the Act and long explanatory letters to the local authorities of 13 of the largest towns. On the 10th of June I received a supply of the circulars prepared by you to accompany the provisions of the Act, and immediately despatched them to the municipal commissioners of 26 towns and to the boards of guardians of 20 unions. It is probable that you have received or will receive replies from the authorities to whom your letter was addressed ; and of these I can as yet say nothing, except that the subject has occupied the attention of the various corporations, and that inquiries are being made as to the best manner of discharging the duty devolving upon them.

"In the following towns steps are being taken to put the Act in force :—

"*Belfast.*—The chamber of commerce and one or two town councillors have taken up the matter with great spirit. On the 12th of June I attended a meeting of the law committee of the town council, explained the Act, suggested mode of working ; and it was then resolved to cause 1,000 copies of the abstract of the Act to be printed and circulated, and to appoint the present senior sanitary inspector as inspector of workshops. This resolution was approved at the monthly meeting of the town council on July 1st, and is now being acted upon. When the Act is put in operation in this 'the chief manufacturing and commercial town of Ireland,' I have no doubt that the example will be followed in many other towns.

"*Londonderry.*—The 'mayor convened a meeting of the town council to consider the Act and to put it in operation.' Several of the town councillors promised me that they would give the subject their best attention, and although I have not heard of any course of action having been decided upon, I am informed that it has only been deferred until the decision of the town council of Belfast is made public.

"*Armagh.*—Very prompt action was taken by the town commissioners of this ancient city, and copies of the Act were widely circulated three weeks ago.

"*Newry.*—At a meeting of the town commissioners on June 7th, it was resolved to appoint a committee to enquire into and report as to how the Act could be carried out, and at what expense. At a subsequent meeting the Act was again under consideration, but as some of the members of the committee were absent no order was made.

"From other towns I have received letters asking for information. In all cases I have enumerated the principal enactments, pointed out the kind of places in each district to which they apply, and suggested the steps necessary for carrying them into execution.

"The local authorities can no longer shelter themselves under the plea of ignorance, for an abstract of the Act and explanatory letter have been sent to each of them, and every assistance offered on the part of the factory inspector and sub-inspector. I am of opinion that the Act will no longer remain a 'dead letter' in the north of Ireland, but will be very generally administered and cheerfully obeyed. There is great need of it, especially for the protection of those who earn their living by the use of the needle or sewing machine.

"I am, &c.

"Robert Baker, Esq." "Wm. Dawkins Cramp.

Place.—Leek.

"Workshop Inspector's Report for the Month ending June 1869, showing Plan of Monthly Reports by each Workshop Inspector.

"Sir,

"During the past month the inspections made by me amounted to	183
"Number of workshops in which half-time children are employed	99
"Number of workshops in which half-timers are not employed	135
"Total number of children employed in all the said workshops	207
"Number of children attending school as required by law:	
"Church, national, or parochial school	124
"Methodist	20
"British and foreign	13
"Independent	4
"Baptist	—
"Roman Catholic	19
"Other schools, including dame schools	15
	195

" Number of children not attending school as required by law - - - - - - 12
" Number of workshops in which half-time children were employed all day, or more than 6½ hours - 4
" Number of workshops not kept in a cleanly state - 1
" Number of persons prosecuted - - 1 summoned.
" Number of accidents in workshops, not fatal, seriously injured.
" I certify the above Report to be correct.
Dated the 30th day of June, 1869.
" R. Baker, Esq." " Robert Farrow,
" Inspector of Workshops."

I regret that I am not able this half-year to give the accidents for my district in the usual tabulated form. They amount to 3,864 for the half year, and many of them have been fatal. Mr. Stepney, to whom this work has hitherto been entrusted, has been unable, in consequence of the numerous interruptions on his time, to prepare them, and they stand over consequently for another opportunity.*

List of Workshops visited by Mr. Baker and his Sub-Inspectors to the 30th April 1869.

Bedfordshire.	Higgins and Son. Straw.
	Waterfield, Mrs. Straw hats and bonnets. Clean and well ventilated.
Berkshire.	Booridge, W. Stoves, &c.
	Payne, B. Chains.
	Welman, Bros. Hardware.
Buckinghamshire.	Brown, M. Blacksmith.
	Burnham, R. Bricks.
	Dimmock, T. Blacksmith.
	Jones, J. Chairs.
	Sears, S. Bricks.
	Stevens, J. T. Blacksmith.
	Stevens, T. Blacksmith.
	Tilbury, J. Chairs.
Cheshire.	Earnett and Co. Upholsterers.
	Harland, Brown, and Co. Ships.

* Note.—Since the above was written, Mr. Stepney has by much extra labour prepared these tables.—See pp. 139 and 140 ; also pp. 4 and 7 for " Joint Tables."

	Heap, J. Boots and shoes.
	Hobson, W. Boots and shoes.
	Smith, J. Ships.
Devonshire.	Bayley and Fox. Saw mills.
	Chubb, W Tailor.
	Cridland and Son. Tanners.
	Hancock, Jno. Clay works.
	Huxtable, W. Clay works.
	Mathias, E. Smith.
	Papham and Co. Drapers.
	Sampson, J. Clay works.
	Spooner and Co. Drapers.
	Tucker and Co. Candles.
	Ware, Jno. Clay works.
Dorsetshire.	Balstone, W. Ropes.
	Holland, C. Saw mill.
	Lawrence, S. Articles of metal.
Gloucestershire.	Baker, Miss. Milliner.
	Belcher and Co. Slate enamelling.
	Brimmell, J. & H. Ropes.
	Dowson and Co. Rag sorters.
	Ford, L. Slate and marble works.
	Hill and Price. Nautical instruments.
	Pickard, E. W. Joinery.
	Senior, J. Slate and marble works.
	Sparkes and Tait. Mercers.
	Williams, J. & J. Silver smiths.
Hampshire.	Atkins and Son. Articles of metal.
	Bartlett, J. Saw mills.
	Cox and Co. Fusee chains.
	Hart, Mrs. Fusee chains.
	Mill, J. Dyers.
Lancashire.	Hankisson, P. Fustian.
	Hudson, Bros. Gas fittings.
	Shaw, J. Fustian.
	Sutherland and Co. Dress making.
	Taylor, M. Fustian.
	Woodnorth, W. Blinds.
Leicestershire.	Hardwicke. Hosiery.
	Plant and Co. Boots and shoes.
	Read, T. Boots and shoes.
	Scarborough, J. Rags.
	Squire, W. Boots and shoes.
	Symington, R. W. Stays.
	Temperton and Co. Boots and shoes.
Northamptonshire.	Bunting, T. Boots and shoes.

Northamptonshire.	Cove, J. Boots ond shoes.
	Jones, Messrs. Boots and shoes.
	Newton, G. Boots and shoes.
	Smith and Dawson. Boots and shoes.
	Williams and Co. Curriers.
Shropshire.	Barton, E. White bricks.
	Doughty, Jno. Brick works.
	Exley, W. Tiles.
	Hopley, E. Tiles.
	Jones and Co. Tiles.
	Lawes, T. Tiles.
	Powell, E. Milliner.
	White, Mrs. Milliner.
Somerset.	Browne and Co. Brick works.
	Colthurst and Co. Brick works.
	Colthurst and Co. Brick works.
	Colthurst and Co. Brick works.
	Colthurst and Co. Brick works.
	Major, H. J. and Co. Brick works.
	Major, H. J. and Co. Brick works.
	Eyres, Mrs. Milliner.
	Hammill, J. B. Brick works.
	Williams, Miss. Collars. Clean and comfortable.
Stafford.	Allen, F. Boots and shoes.
	Bates, J. Chimney pots.
	Bradley and Co. Fire bricks.
	Harrod, H. Boots and shoes.
	Sutton and Co. Salt.
	Vernon and Co. Salt.
	Waterfield, W. Fire bricks.
	Ward, J. Boots and shoes.
	Wright, B. P. Boots and shoes.
	Wycherley, W. Boots and shoes.
Warwickshire.	Ashwin and Co. Brick works.
	Austin and Co. Tin boxes.
	Baker, I. Silver smith.
	Buckler. Brick works.
	Burman, T. Brick works.
	Calvert and Co. Milliner.
	Cooper, D. Pearl buttons. Considerable dust.
	Cooksey. Coffin furniture.
	Coventry Gas Co. Gas.
	Esthop, T. Bone buttons.
	Gell, Mrs. Milliner.
	Griffin, W. (executors of). Lime and cement.

	Harrison. Brick works. Clothing very wretched.
	Hookham. Tin plates.
	Hopkins, J. Harness furniture.
	Howe, Mrs. Milliner.
	Lines, Mrs. Milliner.
	Luckman. Polishers.
	Morris. Perambulators.
	Mulloney, S. W. Coach lace.
	Nelson, C. Lime and cement.
	Oldham, W. Lime and cement.
	Sutcliffe. Japanner.
	Hinton, C. Printers.
	Allen, J. Bookbinder.
	Salmons. Carriages, &c.
	Sherard and Co. Mantles.
	Stephenson. Widows caps.
	Smith. Milliner
Wiltshire.	Harris, T. Bacon curer.
Worcestershire.	Bantes, T. Needles.
	Laight, G. Needles.
	Giles and Co. Tiles.
	Mogg and Son. Fishing tackle.
	Turner, R. B. Needles.
	Webb and Co. Manure.
	Wales.
Brecon.	Allen, B. and Co. Fire bricks.
Carnarvonshire.	Cook and Co. Slate works.
Denbighshire.	Ellis and Co. Soda water.
	Lester and Co. Lime burning.
	Union lead works. Lead.
Glamorganshire.	Glamorgan Coal Co. Brick works.
	Poole Co. Repairs of wheels.
	Ireland.
Antrim.	Alderice, H. Sewing works.
	Gillsland, H. Sewed muslin.
	Harrison, T. Boots and shoes.
	Roden, I. Drying waste for paper making.
	Steen and Co. Fancy boxes.
Dublin.	Cantrel and Co. Mineral waters.
	Daniel, W. Founder.
	Domfield and Co. Boilers.
Kildare.	Doyle and Son. Paste boards.
Tyrone.	Brown, J. Soap and candles.

The following gentlemen have been appointed certifying surgeons since the 31st October, 1868 :—

Mr. N. Whitchurch.—Nov. 2, 1868.—Melton, Leicestershire.
S. Harris, Esq,—Nov. 2, 1868.—Quorndon, Leicestershire.
V. W. Russell, Esq.—Nov. 10, 1868.—Thurles, Tipperary, Ireland.
J. E. Jones, Esq.—Nov. 26, 1868.—Dolgelly, Wales.
D. Bowen, Esq.—Nov. 12, 1868.—Newport, Pembrokeshire.
E. S. Machin, Esq. — Nov. 16, 1868. — Sutton Coldfield, Warwickshire.
J. Macaw, Esq.—Nov. 17, 1868.—Bushmills, Ireland.
S. Carson, Esq.—Nov. 18, 1868.—Alston, Cumberland.
B. T. Burton, Esq.—Dec. 3, 1868.—Windsor, Berks.
J. P. Vay, Esq.—Dec. 10, 1868.—Portsmouth, Hants.
E. Jenkins, Esq.—Dec. 10, 1868.—Llansawel, Carmarthen.
E. P. Phillips, Esq — Dec. 11, 1868. — Haverfordwest, Pembrokeshire.
C. R. Straton, Esq.—Dec. 12, 1868.—Wilton, Wilts.
V. Lush, Esq.—Jan. 5, 1869.—Weymouth, Dorset.
T. S. Ludlow, Esq.—Jan. 23, 1869—Hinckley, Leicestershire.
T. F. Fernandez, Esq.—Jan. 28, 1869.—Ross, Herefordshire.
T. F. Clarke, Esq.—Feb. 3, 1869.—Wantage, Berks.
W. J. Croly, Esq.—Feb. 18, 1869.—Abbeyleix, Ireland.
G. Michell, Esq.—Feb. 6, 1869.—Redruth, Cornwall.
W. A. Rogers, Esq.—March 10, 1869.—Wolverton, Bucks.
J. K. Welch, Esq.—Feb. 16, 1869.—Christchurch, Hants.
G. Lowe, Esq.—March 10, 1869.—Burton-on-Trent.
E. J. Barker, Esq.—March 4, 1869.—Aldershot, Hants.
J. J. Drake, Esq.—March 12, 1869.—Newton Abbot.
W. Croome, Esq.—March 17, 1869.—Kilmersden, nr. Bath.
W. John Clapp, Esq.—March 15, 1869.—Nantyglo, Iron Works., Tredegar, Monmouthshire.
J. Taylor, Esq.—March 28, 1869.—Chester.
M. Sterling, Esq.—April 9, 1869.—Thomastown, Ireland.
N. T. Davies, Esq.—April 1, 1869.—Abertillery Tin Plate Company.
B. Pinniger, Esq.—April 9, 1869.—Ryde, Isle of Wight.
E. R. Floyd, Esq.—April 4, 1869.—Lucan, Dublin.
W. Belcher, Esq.—April 28, 1869.—Bandon, Cork.
F. A. Taylor, Esq.—May 14, 1869.—Romsey, Hants.
H. R. West, Esq.—May 4, 1869.—Harpenden, Herts.
J. Johnston, Esq.—May 14, 1869.—Galgate, Lancaster.

I have the honour to be,
Sir,
Your most obedient servant,
ROBERT BAKER.

The Right Honourable
The Secretary of State for the Home Department.

Appendix No. 1.

Return of Prosecutions for Offences against the Factories, &c. Regulation Acts, in the District of Robert Baker, Esq., Inspector of Factories, during the Six Months ended 30th April 1869.

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	Remarks.
1868.			*Informations laid by Mr. Kent.*	£ s. d.	£ s. d.	
Dec. 31	Jabez Roberts, Ystpetty -	Rev. J. Jones and Rev. O. Jones, Cenigydruidon Petty Sessions.	Employing a child before noon and after 1 o'clock the same day.	1 0 0	0 11 6	
"	" "	" "	Employing a child without entering name, &c. in the register.	- -	0 9 0	Withdrawn on payment of costs.
"	" "	" "	Employing a child without a schoolmaster's certificate.	- -	0 9 0	Withdrawn on payment of costs.
			Informations laid by Mr. Steen.			
Nov. 4	Owen Fletcher, fustian cutter, Macclesfield.	David Clarke, Esq., mayor, Wm. Barnett, Esq., Richard Wright, Esq., Macclesfield Petty Sessions.	Employing five children more than six hours and thirty minutes on one day.	5 0 0	2 10 0	
"	" "	" "	Employing ten children more than six hours and thirty minutes on one day.	- -	4 5 0	Withdrawn on payment of costs.
1869. April 10	Runcorn Soap and Alkali Co., Limited, Weston Works.	Robert Whiteway, Esq., William Brundrit, Esq., Runcorn Special Sessions.	Employing a young person after 6 p.m., to wit, at 8.30 p.m.	1 0 0	0 9 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1869.			*Informations laid by Mr. Steen*—cont.	£ s. d.	£ s. d.	
April 10	Runcorn Soap and Alkali Co., Limited, Weston Works.	Robert Whiteway, Esq., William Brundrit, Esq., Runcorn Special Sessions.	Employing a young person after 6 p.m. - -	- -	0 5 6	Withdrawn on payment of costs.
„	Runcorn Soap and Alkali Co., Limited, Runcorn Works.	„ „	Employing two young persons after 6 p.m. - -	- -	0 11 0	Withdrawn on payment of costs.
1868.			*Informations laid by Commander May, R.N.*			
Nov. 26	Kinnersley & Co., Kidsgrove.	J. E. Davis, Esq., Stipendiary, Tunstall.	Employing six children and young persons without registration.	2 0 0	2 0 0	One case withdrawn. Four cases withdrawn on payment of costs.
„	„ „	„ „	Employing five children and young persons without surgical certificates.	2 0 0	1 4 6	One case withdrawn. Three cases withdrawn on payment of costs.
„	„ „	„	Employing ten children during the night -	2 0 0	3 17 0	Nine cases withdrawn on payment of costs.
Dec. 9	Wm. Hammersley & Co., Leek.	Matthew Gaunt and Joshua Brough, Esqs., Leek.	Neglecting to register the employment of a female in dye works after 6 p.m.	2 0 0	0 19 6	
Dec. 14	Charles Ford, Hanley -	J. E. Davis, Esq., Stipendiary, Hanley.	Employing a child before noon and after 1 p.m. on the same day.	1 0 0	0 10 6	
„	„ „	„ „	Employing a child without a school certificate.	1 0 0	0 14 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1869.			*Informations laid by Commander May, R.N.*—cont.	£ s. d.	£ s. d.	
Jan. 11	Thomas Hassall, Hanley	J. E. Davis, Esq., Stipendiary, Hanley.	Employing two young persons during the night	2 0 0	1 3 6	One case withdrawn on payment of costs.
Feb. 9	Edward Pattison, Burslem	J. E. Davis, Esq., Stipendiary, Burslem.	Employing a young person during the night	2 0 0	—	
Feb. 12	Joseph Holdcroft, Stoke	J. E. Davis, Esq., Stipendiary, Stoke.	Employing three young persons without surgical certificates.	2 0 0	1 10 6	Two cases withdrawn on payment of costs.
"	Joseph Holdcroft, jun., Stoke.	" "	Making three false entries in the register of young persons.	5 0 0	1 10 6	Two cases withdrawn on payment of costs.
Feb. 19	J. B. Wathen, Fenton	J. E. Davis, Esq., Stipendiary, Fenton.	Employing a child without a school certificate	- -	- -	Withdrawn.
"	" "	" "	Failing to produce school certificates for two children,	2 0 0	0 11 0	One case withdrawn.
"	" "	" "	Employing a child before noon and after 1 p.m. on the same day.	1 0 0	0 12 0	
"	Wm. Locker, Fenton	" "	Allowing his child to be employed before noon and after 1 p.m. on the same day.	0 5 0	0 12 0	
Feb. 25	James Moore, Kidsgrove	J. E. Davis, Esq., Stipendiary, Tunstall.	Employing a young person in an iron mill during the day, the said young person having been employed during the preceding night.	- -	- -	Information withdrawn, the young person being proved to be over 16 years of age.
"	Edward Guy, Kidsgrove	" "	Employing a young person on two successive turns as above.	1 0 0	0 19 0	

RETURN OF PROSECUTIONS—*continued.*

Date	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1869.			*Informations laid by Commander May, R.N.*—cont.	£ s. d.	£ s. d.	
Feb. 25	Edward Guy, Kidsgrove -	J. E. Davies, Esq., Stipendiary, Tunstall.	Employing a young person without registration -	- -	0 14 6	Withdrawn on payment of costs.
Mar. 25	Israel Gibson, Tunstall -	" "	Employing a young person during the time allowed for meals.	- -	0 11 0	Withdrawn on payment of costs.
"	Wm. Price, Tunstall -	" "	Employing a young person during the time allowed for meals.	- -	0 11 0	Withdrawn on payment of costs.
April 14	Matthew Colley, Longton	S. Bridgwood and T. Goddard, Esqs., Longton.	Neglecting to cause his child to attend school -	0 5 0	1 13 6	
			Informations laid by Mr. Girardot.			
Mar. 24	Elliott & Co., Straw Bonnet Manufacturers, Dunstable.	Saml. Burges, Esq., mayor, and J. Gutteridge, Esq., Dunstable.	Employing five females after 8 p.m. on March 12th, 1869.	5 0 0	0 17 6	This being a first offence, only a limited number of cases were taken.
April 19	Munt & Brown, Straw Bonnet Manufacturers, Luton.	Rev. H. B. Smyth, chairman, G. Sowerby, Esq., and others.	Employing five females after 8 p.m. on March 23rd	5 0 0	2 2 6	This being a first offence, only a limited number of cases were taken.
"	Reid & Gilder, Straw Bonnet Manufacturers, Luton.	" "	Employing five females after 8 p.m. on March 23rd	- -	- -	Withdrawn by the sub-inspector on it being proved to the satisfaction of the Court that fifty persons had not been employed for 100 days during that or the previous year.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1869.			*Informations laid by Mr. Fitton.*	£ s. d.	£ s. d.	
Feb. 4	The Droitwich Salt Company, Limited.	J. A. Fardon, Esq., and T. G. Smith, Esq., Droitwich Town Hall.	Employing two women after 2 p.m. on Saturday, January 16th, 1869; in each case 13*s.*	- -	1 6 0	Dismissed, on the ground that as the women were not employed more than 8 hours on any day of the week, they might be employed after 2 p.m. on Saturday, under Factory Act Extension Act, 1867. The women work at intervals from 6 a.m. till 6 p.m., at four "draws" of salt, each draw occupying not quite two hours of time. The magistrates decided that as the women are not actually *at work for 8 hours a day*, although the time during which their work is done extends beyond 8 hours, they are entitled to work after 2 p.m. on Saturday, by Per. Mod., Schedule 23, Factory Act Extension Act, 1867.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1869.			*Informations laid by Mr. Fitton*—cont.	£ s. d.	£ s. d.	
April 16	Charles Samuel, puddler, of Ebbw Vale, Monmouth.	Rev. Edmund Leigh, of Tredegar, and Rev. David Morgan, of Blaina, at Police Court, Tredegar.	Allowing his son, a child of 8 years old, to be unlawfully employed at Victoria Furnaces, Ebbw Vale, on March 20th.	0 10 0	0 16 0	In this case the man Charles Samuel took advantage of the foreman's illness and consequent absence to bring his boy with him, and to work him for several days in the furnaces.
1868.			*Informations laid by Mr. Beadon.*			
Dec. 10	C. A. Day & Co., Northam Iron Works, Southampton.	J. H. Cookney, Samuel Tryen, and Sylvanus Stretton, Esqs., Southampton.	Employing two young persons after 6 p.m. - -	2 0 0	0 17 6	Two charges withdrawn on payment of costs.
"	" "	" "	Employing one young person over seven days without a surgical certificate.			
"	E. Paul & Son, Printers, High Street, Southampton.	" "	Employing one young person after 4.30 p.m. on a Saturday.	2 0 0	0 17 6	Two charges withdrawn on payment of costs.
"	" "	" "	Employing one young person without entering his name on the register.			
"	" "	" "	Employing one young person over seven days without a surgical certificate.			

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1868.			*Informations laid by Mr. Beadon*—cont.	£ s. d.	£ s. d.	
Dec. 10	T. G. Gutch, printer, Southampton.	J. H. Cookney, Samuel Tryen, and Sylvanus Stretton, Esqs., Southampton.	Employing one young person after 4.30 p.m. on a Saturday.	2 0 0	0 12 6	One charge withdrawn on payment of costs.
"	" "	" "	Employing one young person after 6 p.m. - -			
1869.						
Jan. 7	British and Irish Sugar Refining Company (Limited), Plymouth.	Alex. Hubbard, Esq., mayor, and H. Brown, Esq., Plymouth.	Employing one young person without entering his name on the register.	2 0 0	- -	Three charges withdrawn on payment of costs.
"	" "	" "	Employing one young person over seven days without a surgical certificate.			
"	" "	" "	Employing one young person after 4.30 p.m. on Saturday, 12th December 1868.			
"	" "	" "	Neglecting to hang up the abstract of the Factory Acts as by law directed.			
Jan. 21	Henry Besley, printer, Exeter.	H. S. Ellis, Esq., mayor, S. S. Bastard, Esq., and J. Damerel, Esq., Exeter.	Employing one young person after 2 p.m. on a Saturday.	1 0 0	0 19 0	Defendant refused to arrange for the withdrawal of any of the charges.
"	" "	" "	Neglecting to hang up the abstract of the Factory Acts as by law directed.	2 0 0		
"	" "	" "	Neglecting to hang up the notice containing the address of the Inspector of Factories of the district.	2 0 0		

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1869.			*Informations laid by Mr. Beadon*—cont.	£ s. d.	£ s. d.	
Jan. 21	Tozer & Spicer, Printers, Exeter.	H. S. Ellis, Esq., mayor, S. S. Bastard, Esq., and J. Damerel, Esq., Exeter.	Employing two young persons after 6 p.m. and in the night.	2 0 0	0 8 6	One charge withdrawn on payment of costs.
April 15	Samuel Horsey & Son, Printers, Portsmouth.	G. C. Stegant, Esq., and A. Nance, Esq., Portsmouth.	Employing one young person after 2 p.m. on a Saturday.	1 10 0	0 9 0	
April 21	Bullock & Co., tobacco manufacturers, Southampton.	E. Palk, Esq., and Joseph Clark, Esq., Southampton.	Employing two young persons after 2 p.m. on a Saturday.	2 0 0	0 17 0	
			Informations laid by Mr. Faussett.			
Feb. 2	James Holt, Chorley, Lancashire.	T. B. Crosse, Esq., E. E. Silvester, Esq., and W. H. Talbot, Esq.	Employing a young person without registering her name.	2 0 0	0 10 0	
"	" "	" "	Employing a child without registering her name -	2 0 0	0 10 0	
"	" "	" "	Employing a child without registering his name -	- -	0 5 6	Case withdrawn on payment of costs.
"	" "	" "	Employing a child without registering her name -	- -	0 5 6	Case withdrawn on payment of costs.
"	" "	" "	Neglecting to limewash his works within the time required by law.	3 0 0	1 0 0	
"	John Henry Clarkson, Chorley, Lancashire.	" "	Obstructing the sub-inspector in the execution of his duty by attempting to conceal a young person and three children.	3 0 0	0 10 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1868.			*Informations laid by Mr. Blenkinsopp.*	£ s. d.	£ s. d.	
Nov. 9	Thomas Haines, brick and tile maker, near Dudley Port.	Isaac Spooner, Esq., Stipendiary, West Bromwich Police Court.	Neglecting to put up abstract of Factory Acts and notice of address of Inspector, &c.	- -	2 18 0	Defendant pleaded guilty, and promised to keep the law. No fine was pressed for, on condition that all costs were paid.
"	" "	" "	Employing two young persons without entering their names in the register.			
"	" "	" "	Employing one young person without obtaining a surgical certificate.			
1869. Feb. 2	Spring Hill Iron Company, Temple Street, Bilston.	Isaac Spooner, Esq., Stipendiary, Bilston Police Court.	Employing a young person without entering name in register.	1 0 0	4 0 6	Three cases withdrawn on payment of all costs.
"	" "	" "	Employing a young person in same way.			
"	" "	" "	Employing same without surgical certificates.			
"	James Rowley, japanner, Bilston.	" "	Employing a woman after 7 p.m. on December 11th	1 0 0	2 8 6	One case withdrawn on payment of all costs.
"	" "	" "	Employing another woman after 7 p.m. on December 11th.			
"	Edward Smith, Portway Road, Wednesbury.	" "	Neglecting to report an accident - - -	2 0 0	7 13 6	Six cases withdrawn on payment of costs in all cases.
"	" "	" "	Employing seven young persons without registering their names.	1 0 0		

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1869.			*Informations laid by Mr. Blenkinsopp*—cont.	£ s. d.	£ s. d.	
April 12	Waterloo Works Iron Company, Hall End, West Bromwich.	Isaac Spooner, Esq., Stipendiary, Police Court, West Bromwich.	Neglecting to report an accident - - - -	- -	2 2 6	Withdrawn on payment of costs.
April 26	Paul Cashmore, pistol filer, West Bromwich.	,, ,,	Employing a young person after 2 p.m. on Saturday.	1 0 0	1 9 6	
,,	,, ,,	,, ,,	Employing another young person after 2 p.m. on Saturday.	1 0 0	1 9 6	
			Informations laid by Mr. Johnston.			
1868. Dec. 4	Wm. Blews & Sons, Bartholomew Street, Birmingham.	Thomas Phillips and Edwin Gwyther, Esqs., at Public Office, Moor Street, Birmingham.	Employing ten male young persons without surgical certificates.	- -	4 10 0	Withdrawn by direction of R. Baker, Esq., on the defendants paying the costs and undertaking to observe the law for the future.
			Informations laid by Mr. Cramp.			
Nov. 11	Henry George Henderson, letterpress printer, 77, Hill Street, Newry, county Down.	James Thomas Butler, Esq., R.M., and John Quin Henry, Esq., J.P., Newry.	Employing two young persons more than seven working days without surgical certificates.	2 0 0	0 5 0	The defendant having pleaded guilty, expressed his regret, and urged some extenuating circumstances, one case was withdrawn upon payment of costs.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1868.			*Informations laid by Mr. Cramp*—cont.	£ s. d.	£ s. d.	
Nov. 11	Henry George Henderson, letterpress printer, 77, Hill Street, Newry, county Down.	James Thomas Butler, Esq., R.M., and John Quin Henry, Esq., J.P., Newry.	Employing the same two young persons after 7 p.m. on October 23rd.	2 0 0	0 5 0	One case withdrawn upon payment of costs.
"	John Wright, letterpress printer and bookbinder, Water Street, Newry.	" "	Employing four young persons more than seven days without surgical certificates.	4 0 0	0 10 0	A plea of guilty was recorded, and the defendant having proved that he obtained the required certificates on the day following the sub-inspector's visit, two cases were withdrawn upon payment of costs.
Nov. 16	William Trimble, letterpress printer, 7, East Bridge Street, Enniskillen.	Capt. A. S. Butler, R.M., and Geo. C. Brackenridge, Esq., J.P., Enniskillen.	Employing five young persons without having registered their names and date of employment.	2 0 0	0 12 2	Penalty inflicted by the magistrates in one case; fined in costs only in the others.
"	" "	" "	Employing the same five young persons without surgical certificates.	2 0 0	0 12 2	Fined in costs only in four of the cases.
"	" "	" "	Employing the same five young persons after 7 p.m. on October 21st.	2 0 0	0 12 2	Fined in costs only in four of the cases.
Dec. 30	The Ulster Spinning Company, flax spinners, Bath Place Mill, Belfast.	Edward Orme, Esq., R.M., and David Taylor, Esq., J.P., Belfast Petty Sessions.	Employing three females in reeling room after 6 p.m. on December 9th.	3 0 0	0 10 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1868.			*Informations laid by Mr. Cramp*—cont.	£ s. d.	£ s. d.	
Dec. 30	The Ulster Spinning Company, flax spinners, Bath Place Mill, Belfast.	Edward Orme, Esq., R.M., and David Taylor, Esq., J.P., Belfast Petty Sessions.	Employing three females in reeling room after 6 p.m. on December 9th.	- -	0 9 0	Withdrawn upon payment of costs at the suggestion of the magistrates.
"	J. and T. M. Greeves & Co., flax spinners, Forth River Mill, Belfast.	" "	Employing two females in reeling room after 6 p.m. on December 9th.	2 0 0	0 7 0	
"	Gunning and Campbell, flax spinners, Falls Road, Belfast.	" "	Employing nine females in reeling after 6 p.m. on December 14th.	9 0 0	1 11 6	
"	" "	" "	Employing three females in reeling after 6 p.m. on December 14th.	- -	0 9 0	Fined in costs only.
"	William Russell, reeling master at Messrs. Gunning and Campbell's.	" "	Wilfully obstructing the sub-inspector in the execution of his duty.	3 0 0	0 3 6	
"	Joseph Faren & Co., flax spinners, Milewater Mill, Belfast.	" "	Employing ten females in reeling after 6 p.m. on December 15th.	10 0 0	1 15 0	
"	" "	" "	Employing ten females in reeling after 6 p.m. on December 15th.	- -	1 10 0	Fined in costs only.
"	William Ewart & Son, flax spinners, Crumlin Road, Belfast.	" "	Employing two females in reeling after 6 p.m. on December 18th.	2 0 0	0 7 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1868.			*Informations laid by Mr. Cramp*—cont.	£ s. d.	£ s. d.	
Dec. 30	William Ewart & Son, flax spinners, Crumlin Road, Belfast.	Edward Orme, Esq., R.M., and David Taylor, Esq., J.P., Belfast Petty Sessions.	Employing three females in reeling after 6 p.m. on December 18th.	- -	0 9 0	Withdrawn upon payment of costs.
1869. Mar. 15	William Trimble, letter-press printer. 7, East Bridge Street, Enniskillen. co. Fermanagh.	Geo. C. Brackenridge, Esq., J.P., Viscount Cole, J.P., and Capt. Butler, R.M., Enniskillen Petty Sessions.	Employing two young persons during the night of February 24th, the said young persons having also been employed during the preceding day.	- -	0 5 0	No rule made. The magistrates decided that the sub-inspector had no *locus standi* in that court, unless he could produce proof that the district assigned to him included the town of Enniskillen. Cases brought forward *de novo* on April 12th and 26th, when convictions were obtained.
April 23	R. W. Gordon & Co., flax spinners, Upper Falls Mill, Belfast.	Edward Orme, Esq., R.M., and Peter Keegan, Esq., J.P., Belfast Petty Sessions.	Employing a female in reeling after 2 p.m. on Saturday the 3rd of April.	1 0 0	0 2 6	
,,	,, ,,	,, ,,	Employing a female in reeling after 2 p.m. on Saturday the 3rd of April.	- -	0 2 6	Withdrawn on payment of costs.
,,	Milfort Spinning Company, flax spinners, Milfort Mill, Belfast.	,, ,,	Employing a female in reeling during the dinner-time on April 7th.	1 0 0	0 2 6	
,,	,, ,,	,, ,,	Employing a female in reeling during the dinner-time on April 7th.	- -	0 2 6	Withdrawn on payment of costs.

I

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1869.			*Informations laid by Mr. Cramp*—cont.	£ s. d.	£ s. d.	
April 26	William Trimble, letter-press printer, 7, East Bridge Street, Enniskillen.	Geo. C. Brackenridge, Esq., Viscount Cole, Captain Butler, R.M., Dr. Walsh, and William Gore, Esq., Enniskillen Petty Sessions.	Employing a male young person during the night of February 24th, he having also been employed during the preceding day.	5 0 0	0 4 0	Maximum penalty inflicted; costs to be paid by complainant. Case came on for hearing on the 12th of April, and was adjourned until the 26th.
"	" "	" "	Employing a male young person during the night of February 24th, he having also been employed during the preceding day.	5 0 0	0 4 0	Maximum penalty inflicted. Costs to be paid by complainant.
			Informations laid by Mr. Astley.			
April 23	Hands & Son, Newhall Street, electro-plate works.	S. Thornton, C. Sturge, and J. Goodman, Esqs., at Birmingham.	For employing one male young person and one female after 6 p.m.	- -	0 18 0	As defendants had been regular in other respects, the case was withdrawn on payment of costs.
April 28	Yates & Son, Rocky Lane, edged tool factory.	J. Colmae and J. Smallwood, Esqs., at Erdington.	For employing two male young persons after 6 p.m.	- -	0 18 0	This case was also withdrawn on payment of costs, as defendants had been regular in other respects. N.B.—In both the above cases, there were more young persons at work than were actually summoned.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1868.						
Nov. 25	David Lewis, Rhydybont Factory, Llanybyther.	J. L. Fitzwilliams, Esq., at Llanfihangel-ar-arth.	*Informations laid by Mr. Mostyn.* Working three young persons without being registered.	£ s. d.	£ s. d.	
"	" "	" "	Working two young persons without surgical certificates.	- -	1 9 9	Only one magistrate present; could not try the cases; withdrawn, at his suggestion, on payment of costs.
1869. Jan 9th	Landore Tin Plate Company, Landore, near Swansea.	N. P. Cameron, J. Trev Jenkin, and S. S. H. Horman Fisher, Esqs., at Swansea.	Working two young persons without surgical certificates.	4 0 0	0 17 0	
"	" "	" "	Working three young persons without being registered.	6 0 0	1 14 0	
"	" "	" "	Working one child without a school certificate -	- -	0 11 6	Dismissed; magistrates did not consider employment proved.
"	" "	" "	Working one child without being registered -	- -	0 6 0	Withdrawn, no employment having been proved.
Mar 12	David Morris & Co., Vernon Tin Plate Works, Briton Ferry.	Griffith Llewellyn, Esq., John Henry Rowland, Esq., and Rev. Walter Griffiths, at Neath.	Working one child without a surgical certificate -	2 0 0	1 3 6	
"	" "	" "	Working one child without a school certificate -	- -	0 13 6	Withdrawn on payment of costs, at magistrates' suggestion.
"	" "	" "	Working one child without being registered -	- -	0 13 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1868.			*Informations laid by Mr. Bowling.*	£ s. d.	£ s. d.	
Nov. 10	Messrs. Smyth Bros., tanners Blackstock Street, Liverpool.	A. Castellain and W. Crossfield, Esqs., Liverpool.	Employing a young person without registering his name and date of first employment.	2 0 0	0 5 6	
,,	,, ,,	,, ,,	Employing a young person under 16 years of age without a surgical certificate.	2 0 0	0 5 6	
,,	,, ,,	,, ,,	Two similar offences in the case of other young persons.	- -	0 11 0	Withdrawn on payment of costs.
Nov. 14	Mr. Frederick Monks, manager, Whitecross Wire Works, Warrington.	H. Bleckley, T. G. Rylands, Shaw Thewlis, and C. H. Cartwright, Esqs., Warrington.	Employing four young persons without surgical certificates.	8 0 0	1 8 0	
,,	,, ,,	,, ,,	Employing the same young persons without registering their names.	- -	1 2 0	Withdrawn on payment of costs.
Dec. 24	John Stockton, fustian cutter, Dial Street, Warrington.	J. Rylands and P. Robinson, Esqs., Warrington.	Employing a young person after 7 in the evening -	1 0 0	0 4 6	
,,	,, ,,	,, ,,	A similar offence in the case of another young person.	- -	0 4 6	Withdrawn on payment of costs.
1869. Feb. 5	Messrs. John and Thomas Jolley, file cutters, Allen Street, Warrington.	W. Nield and Peter Stubbs, Esqs., Warrington.	Employing four young persons after 6 o'clock in the evening.	4 0 0	2 2 0	
,,	,, ,,	,, ,,	Same offence in the case of four other young persons.	- -	0 14 0	Withdrawn on payment of costs.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1869.			*Informations laid by Mr. Bowling*—cont.	£ s. d.	£ s. d.	
Feb. 5	Messrs. John and Thomas Jolley, file cutters, Allen Street, Warrington.	W. Nield and Peter Stubbs, Esqs., Warrington.	Employing two young persons without registering their names.	4 0 0	1 1 0	
"	" "	" "	Employing the same young persons without surgical certificates.	4 0 0	1 1 0	
"	" "	" "	Same offences in the case of two other young persons.	- -	0 14 0	Withdrawn on payment of costs.
Feb. 8	Jno. James Varley, iron founder, St. Helens.	W. Pilkington and S. H. Bromilow, Esqs., St. Helens.	Employing a young person under 16 years of age without a surgical certificate.	2 0 0	0 7 0	
"	" "	" "	Employing a young person under 16 years of age after six o'clock in the evening.	2 0 0	0 7 6	
"	" "	" "	Employing three other young persons under 16 without surgical certificates.	- -	1 2 0	Withdrawn on payment of costs.
Mar. 1	Chas. Zinling, letterpress printer, Cable Street, Liverpool.	T. Caine and A. Turner, Esqs., Liverpool.	Employing a young person at night, he having been employed during the preceding day.	2 0 0	0 6 6	
"	" "	" "	Employing the same young person in the day, he having been employed during the preceding night.	1 0 0	0 4 6	
"	" "	" "	Employing the same young person without registration.	2 0 0	0 4 6	
"	" "	" "	Employing the same young person without a surgical certificate.	- -	0 4 6	Withdrawn on payment of costs.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1869.			*Informations laid by Mr. Bowling*—cont.	£ s. d.	£ s. d.	
Mar. 1	Matthews Bros., letterpress printers, Thomas Street, Liverpool.	T. Caine and A. Turner, Esqs., Liverpool.	Employing a young person during the night, he having been employed during the preceding day.	2 0 0	0 6 6	
,,	,, ,,	,, ,,	Same offence in the case of another young person	2 0 0	0 6 6	
,,	,, ,,	,, ,,	Same offence in the case of two other young persons.	- -	0 13 0	Withdrawn on payment of costs.
,,	Messrs. Benson & Holme, letterpress printers and bookbinders, Tower Gardens, Liverpool.	,, ,,	Employing a young person during the night, he having been employed on the preceding day.	2 0 0	0 6 6	In this instance the young person had been employed for 35 consecutive hours.
,,	,, ,,	,, ,,	Employing the same young person on the day following, he having been employed on the preceding day.	1 0 0	0 6 6	
,,	,, ,,	,, ,,	Employing a young person on Sunday - -	1 0 0	0 4 6	
,,	,, ,,	,, ,,	Employing the same young person after 2 p.m. on Saturday.	1 0 0	0 4 6	
,,	,, ,,	,, ,,	Employing the same young person during the night, he having been employed during the preceding night.	- -	0 6 6	Withdrawn on payment of costs.
,,	,, ,,	,, ,,	Employing another young person at night, he having been employed during the preceding day.	- -	0 4 6	Withdrawn on payment of costs.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1869.			*Informations laid by Mr. Bowling*—cont.	£ s. d.	£ s. d.	
Mar. 1	Messrs. Benson & Holme, letterpress printers and bookbinders, Tower Gardens, Liverpool.	T. Caine and A. Turner, Esqs., Liverpool.	Employing the same young person in the day, he having been employed during the night.	- -	0 4 6	Withdrawn on payment of costs.
Mar. 15	Robert Callow, fustian cutter, Friar's Green, Warrington.	W. Nield and H. Bleckley, Esqs., Warrington.	Not having limewashed his premises for more than fourteen months.	3 0 0	0 12 6	
"	" "	" "	Employing a young person during mealtime -	1 0 0	0 12 6	
"	" "	" "	Employing a young person without registration -	- -	0 5 6	Withdrawn on payment of costs.
"	" "	" "	Employing the same young person without a surgical certificate.	- -	0 5 6	Withdrawn on payment of costs.
"	" "	" "	Making a false entry in the register - -	- -	0 5 6	Withdrawn on payment of costs.
Mar. 24	John Whitfield, fustian cutter, Cadishead, near Warrington.	G. Trafford, Esq., Stipendiary, Worsley.	Employing a young person after seven o'clock in the evening.	2 0 0	0 17 6	
"	" "	" "	Same offence in the case of another young person	- -	0 7 6	Dismissed. Young person stated in court that she was only in the shop to get her shawl.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
			Informations laid by Mr. Hudson.	£ s. d.	£ s. d.	
1869. April 21	John Groves and Son -	Isaac Spooner, Esq., Stipendiary.	Employing a young person without having previously registered her name and date of first employment.	1 0 0	0 12 0	This defendant pleaded guilty, and as this was the first prosecution for infringement of the Factory Acts Extension Act in Wolverhampton, the magistrate inflicted the lowest penalty of 1*l.* and costs.
			Informations laid by Mr. Earnshaw.			
1868. Oct. 1	Great Western Cotton Company, Bristol.	B. Smith and P. S. Miles, Esqs., &c.	Employing a woman during meal hour - -	1 0 0	0 10 6	
Nov. 28	Chas. Jeynes, Gloucester -	E. G. Halliwell and H. Evans, Esqs.	Neglecting to register a young person - -	2 0 0	0 14 0	There had been in this case careful notice and warning given, but there was persistent and unqualified neglect in obeying the Act, and each case at the hearing was strongly defended.
,,	,, ,,	,, ,,	Employing another young person more than seven days without surgical certificate.	2 0 0	1 13 6	
,,	,, ,,	,, ,,	Employing a young person until 10 o'clock at night	2 0 0	0 9 0	
,,	,, ,,	,, ,,	Employing another young person without registering name and date of employment.	2 0 0	0 11 6	
,,	,, ,,	,, ,,	Refusing or neglecting to fence steam-engine -	- -	- -	Withdrawn.
Dec. 3	Edward Bush, Bristol -	C. Castle and H. C. Harford, Esqs.	Employing a young person without having registered his name and date of employment.	2 0 0	0 12 6	
,,	,, ,,	,, ,,	The like of another young person - - -	2 0 0	0 12 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1868.			*Informations laid by Mr. Earnshaw*—cont.	£ s. d.	£ s. d.	
Dec. 3	Edward Bush, Bristol -	C. Castle and H. C. Harford, Esqs.	Employing a young person for more than seven days without surgical certificate.	2 0 0	0 12 6	
,,	,, ,,	,, ,,	The like of another young person - - -	2 0 0	0 12 6	
,,	,, ,,	,, ,,	Not having registered the name of a third young person.	- -	- -	Dismissed.
,,	William Harding -	,, ,,	Not keeping register - - - - -	- -	- -	Withdrawn.
,,	,, ,,	,, ,,	Employing young person without having registered his name.	- -	- -	Dismissed. The magistrates decided, though the lad was at work, that was not sufficient proof of employment.
1869. Mar. 3	Mark Anstey, self-acting mule minder, Bristol.	R. P. King and C. J. Thomas, Esqs., Council House, Bristol.	Employing a young person between carriage and roller-beam of a self-acting mule whilst in motion, causing thereby serious bodily injury, and endangering also the lives of two other young persons.	3 0 0	0 9 0	
Mar. 20	Saml. J. Moreland, City Saw Mills, Gloucester.	E. G. Hallewell, T. Marling, H. Evans, and T. de Winton, Esqs., Shire Hall, Gloucester.	Employing a child more than the legal number of hours.	1 0 0	1 14 0	
,,	,, ,,	,, ,,	Employing a child before noon and after 1 o'clock of the same day.	1 0 0	0 4 6	Penalties in these two cases not asked for, publicity being more the object of the proceedings.
,,	,, ,,	,, ,,	Employing a child without a school certificate -	1 0 0	0 4 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
			Informations laid by Mr. Earnshaw—cont.	£ s. d.	£ s. d.	
1869.						
April 26	Thomas Harper, letter-press printer, Cheltenham.	W. J. Agg, Esq., and Sir Alexander Ramsay, Bart.	Unlawfully obstructing sub-inspector by refusing to be examined by him, and by forbidding one of his workmen answering questions put to him by the sub-inspector.	3 0 0	0 7 10	
"	" "	" "	Not producing register on the demand of the sub-inspector.	- -	0 7 10	This charge was dismissed, the chairman adding "without the least imputation against the inspector."
"	" "	" "	Neglecting to hang up abstract at the entrance of his factory.	2 0 0	0 7 10	
"	" "	" "	Employing or suffering to be employed a young person without having registered his name and date of employment.	2 0 0	0 7 10	The Bench convicted in this case, but expressed a hope that the two penalties in the two former convictions might be held to be sufficient. In consequence, this penalty has not been exacted.

Appendix No. 2.

Table No. I.—*Accidents arising from Machinery.*

Nature of Injury.	Adults.		Young Persons.		Children.		Total.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.& F.
Causing death	18	1	4	1	3	–	25	2	27
Amputation of right hand or arm	4	2	2	2	–	–	6	4	10
Amputation of left hand or arm	4	–	2	–	–	–	6	–	6
Amputation of part of right hand	33	5	35	9	7	4	75	18	93
Amputation of part of left hand	30	18	28	12	5	5	63	35	98
Amputation of any part of leg or foot	2	–	–	–	–	–	2	–	2
Fracture of limbs and bones of trunk	43	3	28	4	4	–	75	7	82
Fracture of hand or foot	22	3	17	7	1	1	40	11	51
Injuries to head and face	16	8	12	15	8	1	36	24	60
Lacerations, contusions, and other injuries not enumerated above	250	59	232	74	41	22	523	155	678
Total	422	99	360	124	69	33	851	256	1,107

Table No. II.—*Accidents not arising from Machinery.*

Nature of Injury.	Adults.		Young Persons.		Children.		Total.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.&F.
Causing death	20	–	2	–	3	–	25	–	25
Amputation of right hand or arm	1	–	–	–	–	–	1	–	1
Amputation of left hand or arm	1	–	–	–	–	–	1	–	1
Amputation of part of right hand	9	–	7	3	1	–	17	3	20
Amputation of part of left hand	15	1	8	1	–	–	23	2	25
Amputation of any part of leg or foot	6	–	1	–	–	–	7	–	7
Fracture of limbs and bones of trunk	43	3	28	4	4	–	75	7	82
Fracture of hand or foot	46	1	12	1	–	–	58	2	60
Injuries to head and face	261	5	109	6	4	–	374	11	385
Lacerations, contusions, and other injuries not enumerated above	1622	28	441	28	25	7	2088	63	2151
Total	2024	38	608	43	37	7	2669	88	2757
Total Number reported	2446	137	968	167	106	40	3520	344	3864

APPENDIX to MR. BAKER'S REPORT for the Six Months ended the 31st October 1868, but which,—from the great increase of these Reports, together with the other Clerical Office business,—it was not possible to get accurately made up at that period.

TABLE No. I.—*Accidents arising from Machinery.*

Nature of Injury.	Adults.		Young Persons.		Children.		Total.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.&F.
Causing death	28	–	9	–	–	–	37	–	37
Amputation of right hand or arm	4	1	3	–	1	1	8	2	10
Amputation of left hand or arm	4	3	1	–	–	1	5	4	9
Amputation of part of right hand	32	15	33	23	6	6	71	44	115
Amputation of part of left hand	23	6	20	13	3	3	46	22	68
Amputation of any part of leg or foot	1	–	5	–	1	–	7	–	7
Fracture of limbs and bones of trunk	21	6	21	5	5	3	47	14	61
Fracture of hand or foot	15	11	11	7	2	–	28	18	46
Injuries to head and face	27	9	11	16	2	2	40	27	67
Lacerations, contusions, and other injuries not enumerated above	312	85	266	113	54	31	632	229	861
Total	467	136	380	177	74	47	921	360	1281

TABLE No. II.—*Accidents not arising from Machinery.*

Nature of Injury.	Adults.		Young Persons.		Children.		Total.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.&F
Causing death	21	2	6	–	–	–	27	2	29
Amputation of right hand or arm	2	–	–	–	–	–	2	–	2
Amputation of left hand or arm	–	–	1	–	–	–	1	–	1
Amputation of part of right hand	11	–	5	–	4	–	20	–	20
Amputation of part of left hand	12	1	4	–	–	–	16	1	17
Amputation of any part of leg or foot	5	–	2	1	–	–	7	1	8
Fracture of limbs and bones of trunk	58	3	30	3	6	–	94	6	100
Fracture of hand or foot	30	1	1	1	1	–	32	2	34
Injuries to head and face	159	3	65	3	3	–	227	6	233
Lacerations, contusions, and other injuries not enumerated above	1138	29	376	18	51	3	1565	50	1615
Total	1436	39	490	26	65	3	1991	68	2059
Total number reported	1903	175	870	203	139	50	2912	428	3340

LONDON:
Printed by GEORGE E. EYRE and WILLIAM SPOTTISWOODE,
Printers to the Queen's most Excellent Majesty.
For Her Majesty's Stationery Office.

REPORTS

OF THE

INSPECTORS OF FACTORIES

TO

Her Majesty's Principal Secretary of State for the Home Department,

FOR THE

HALF YEAR ENDING 30TH APRIL 1869.

Presented to both Houses of Parliament by Command of Her Majesty.

LONDON:
PRINTED BY GEORGE E. EYRE AND WILLIAM SPOTTISWOODE
PRINTERS TO THE QUEEN'S MOST EXCELLENT MAJESTY.
FOR HER MAJESTY'S STATIONERY OFFICE.

1869.

EMIGRATION COMMISSION.

TWENTY-NINTH GENERAL REPORT

Vol 17

OF THE

EMIGRATION COMMISSIONERS.

1869.

Presented to both Houses of Parliament by Command of Her Majesty.

LONDON:
PRINTED BY GEORGE E. EYRE AND WILLIAM SPOTTISWOODE,
PRINTERS TO THE QUEEN'S MOST EXCELLENT MAJESTY.
FOR HER MAJESTY'S STATIONERY OFFICE.

1869.

Price 1s. 2d.]

EMIGRATION COMMISSION.

TWENTY-NINTH GENERAL REPORT

OF THE

EMIGRATION COMMISSIONERS.

1869.

Presented to both Houses of Parliament by Command of Her Majesty.

LONDON:
PRINTED BY GEORGE E. EYRE AND WILLIAM SPOTTISWOODE,
PRINTERS TO THE QUEEN'S MOST EXCELLENT MAJESTY.
FOR HER MAJESTY'S STATIONERY OFFICE.

23717. 1869.

CONTENTS.

	Page
PRELIMINARY REMARKS	1
PASSENGERS' ACTS	6
EMIGRATION FROM INDIA TO MAURITIUS AND WEST INDIES	9
CHINESE EMIGRATION	11
MAURITIUS	13
WEST INDIES:	
Jamaica	15
British Guiana	16
Trinidad	17
St. Vincent	20
Grenada	20
St. Lucia	21
St. Kitts and Anguilla	22
Bahamas	22
Honduras	23
AUSTRALIAN COLONIES:	
New South Wales	27
Queensland	28
Victoria	33
South Australia	33
Western Australia	35
Tasmania	36
New Zealand	37
NORTH AMERICAN COLONIES:	
Canada	39
British Columbia and Vancouver Island	41
CAPE OF GOOD HOPE	43
NATAL	43
LABUAN	44
FALKLAND ISLANDS	45
APPENDIX	47

LIST.

PRELIMINARY REMARKS.

	Page
Emigration, 1868	1
Decrease in the number of British emigrants	1
Increase in the foreign emigration	1
Decrease in the Irish emigration	2
Money remitted from America for assisting emigration of friends	2
Number of emigrants to the United States	2
Number of Irish emigrants to the United States	2
Emigrants carried to North America in steam and sailing vessels	2
Mortality in steam and sailing vessels	3
Accidents to passenger vessels at sea	3
Emigration to Australia and New Zealand	3
The smallest since 1847	3
Government emigration	4
Victoria.—Transfer of conduct of, to agent general of the colony	4
New South Wales.—Assisted emigration suspended	4
South Australia.—No emigrants selected for passage in 1868	4
Western Australia.—Emigrants despatched in 1868	4
Queensland.—Emigrants despatched in 1868	4
New Zealand.—Emigrants despatched in 1868	5
Occupation of emigrants from United Kingdom in 1868	5
Emigration during the first three months of the years 1863 to 1868	5

PASSENGERS' ACTS.

Assimilation of the passenger laws of the countries in Europe from which emigrants proceed to the United States with the laws of that country	6
Prosecutions under Acts	9
Amounts recovered by emigration officers	9

INDIAN EMIGRATION.

Mauritius.—Number of Indians received in 1868	9
West Indies.—Number of Emigrants despatched to, in season 1867–68	9
Mortality on the voyage	10
Number of Coolies despatched in season 1868–69	10
To British Guiana, Trinidad, and Jamaica	10
Mortality on the voyage	10
Proportion of females to males	10

CHINESE EMIGRATION.

Page
Emigration to West Indies suspended - 11
Emigration from Macao - 12
Regulations issued for the correction of the abuses in - 12
Number of Chinese introduced into Cuba - 12
Expenses of importation - 12
Hong Kong emigration ordinance of 1868 - 13

MAURITIUS.

Number of immigrants in colony - 13
Proportion of females to males - 13
Number of arrivals in 1868 - 13
Number of departures in 1868 - 13
Ordinance for the consolidation and amendment of the laws relating to Indian immigrants and other labourers - 13
Regulations issued under the above ordinance - 14
Number of male immigrants on estates - 14
Condition of camps and hospitals - 14
Slaves from Mozambique - 14
Immigration from Réunion - 14
Resignation of permanent surgeons in immigration service - 15

JAMAICA.

Number of emigrants despatched from India in 1868–69 - 15
Law for laying duty on persons possessing certain descriptions of land - 15

BRITISH GUIANA.

Number of emigrants despatched from India in 1868–69 - 16
Number of immigrants in colony - 16
Number of employed on estates - 16
Results of immigration since 1857 - 16
Number of Creole labourers working on estates - 16
Renewal of engagements by immigrants - 17
Drainage of the county of Demerara - 17

TRINIDAD.

Number of emigrants despatched from India in 1868–69 - 17
Number of immigrants in colony - 17
Results of immigration since 1852 - 17
Charter of vessels to convey 300 Coolies entitled to back passage to India 17
Immigration ordinance of 1868 - 17
Working of the scheme for the suppression of squatting, and sale of Crown Lands - 17
Mode of selling lagoon or swampy lands - 19
Ordinance for abolishing the court of intendant and regulating the sale of Crown Lands - 19
Ordinance for facilitating the plantation and settlement of Crown Lands - 19

ST. VINCENT.

Page
Condition of Coolies - - - - - - - - 20
Number of Coolies working under indenture - - - - 20
Mortality in 1868 - - - - - - - - 20
Number of emigrants despatched from Calcutta in 1868–69 - - 20

GRENADA.

Number of immigrants in Colony - - - - - 20
Mortality in 1868 - - - - - - - - 20
Return Coolies to India per "Lincelles" - - - - 20
Money deposited by immigrants for transmission to India - 21
Act for the payment of bounties to Indian immigrants for prolonging their term of service - - - - - - 21

ST. LUCIA.

Number of immigrants in Colony - - - - - 21
Mortality in 1868 - - - - - - 21
Commutation by Coolies of right to back passage - - - - 21
Return of Coolies to India per "Lincelles" - - - - 21
Money deposited by immigrants for transmission to India - - - 21

ST. KITTS AND ANGUILLA.

Immigration - - - - - - - - - - 22
Settlement of claims to land in Anguilla - - - - 22

BAHAMAS.

Salt ponds - - - - - - - - - 22
Conversion of leasehold into freehold tenure - - - 22
Claim of inhabitants of the Island of Eleuthera to the land on which they are settled - - - - - - - - - 22

HONDURAS.

Tenure of land - - - - - - - - - 23
Immigration from the United States - - - - - 25
Act for the encouragement of agricultural and other labourers - - 26
Chinese immigrants in Colony - - - - - - 26

NEW SOUTH WALES.

Land revenue - - - - - - - - 27
Gold revenue - - - - - - - - - 27
Revenue of 1867 and 1868 - - - - - - 27
Immigration and emigration - - - - - - 28
Emigration of persons to San Francisco - - - - 28

QUEENSLAND.

	Page
Land sales	28
Lands leased	28
Immigration and emigration	28
Population	29
Act to consolidate and amend the laws relating to the alienation of Crown Lands	29
Act to amend the Imigration Act of 1864	31
Immigration of South Sea Islanders	32
Number introduced	32
Act for regulating this immigration	32

VICTORIA.

Land sales	33
Number of miners on the gold fields	33
Value of mining plant	33
Extent of auriferous ground under work	33

SOUTH AUSTRALIA.

Land sales	33
„ leased	33
„ alienated and under cultivation	34
Immigration and emigration	34
Population	34
Land Acts passed in 1867	34
Exploration of Northern Territory	35
Amendment of Northern Territory Act	35

WESTERN AUSTRALIA.

Land sales	35
Extent of land alienated	35
Immigration and Emigration	36
Amendment of the law relating to trespass of live stock	36

TASMANIA.

Land sales	36
„ alienated	36
„ held under depasturing licences	36
Population	37
Immigration and emigration	37
Amendment of Waste Lands Act of 1863	37

NEW ZEALAND.

Land sales	37
„ held under depasturing and other leases	37
Population	38

Page

Imports and exports - - - - - - - 38
Gold exported - - - - - - - 38
Income and expenditure - - - - - - 38
Immigration and emigration - - - - - - 38
Act to make permanent provision for immigration, and other purposes - 39

CANADA.

Emigration from the United Kingdom - - - - 39
Emigration of discharged artizans and mechanics from Her Majesty's Dockyards - - - - - - - 40
Number despatched in the troop ship "Crocodile" - - 40
" " " "Serapis" - - - 40
Emigration from the distressed districts of London - - - 41

BRITISH COLUMBIA.

Ordinance for the settlement of all outstanding questions relating to the sale of land for taxes in Vancouver Island - - - - 41
Pre-emptive system of land sales—
Quantity of land disposed of under this system in British Columbia and Vancouver Island - - - - - 42

CAPE OF GOOD HOPE.

Land Acts passed in 1867 - - - - - - 43

NATAL.

Land scheme for the encouragement of emigration - - - 43
Land orders issued in 1868 - - - - - 43
Number of persons introduced into the Colony - - - 43
Extension of scheme to emigrants from Australia - - - 44
Immigration from India - - - - - 44
Discovery of gold in the South African Republic - - - 44
Arrival of miners from Australia - - - - 44

LABUAN.

Lease of coal mines transferred to the Oriental Coal Co. (Limited) - 44
Introduction of convicts from Straits Settlements - - 45

FALKLANDS.

Result of new land regulations - - - - - 45

APPENDIX.

EMIGRATION RETURNS.

GENERAL EMIGRATION.

Page

No. 1. Total emigration from the United Kingdom for each of the 53 years from 1815 to 1868 inclusive - - - - 48

No. 2. Table showing the ports in the United Kingdom from which emigrants embarked, the number embarked at each port, and the countries to which they emigrated, in 1868 - - 50

No. 3. Table showing the number of each sex that emigrated from each of the three divisions of the United Kingdom, and the countries to which they emigrated, in 1868 - - - - - 52

No. 4. Table of the amount of emigration in 1868 from each port in the United Kingdom at which there is an emigration officer, and from all other ports, showing the general destination, status, and nationality of the emigrants, and distinguishing adults from children - - - - - - - - 54

No. 5. Summary of the amount and particulars of the emigration to each of the four general geographical divisions to which emigrants proceeded in 1868 - - - - - - 56

No. 6. Table showing the occupation, sex, and general destination of the emigrants in 1868 - - - - - 57

No. 7. Table showing the details of the emigration to the Australian colonies, Natal, and the Falkland Islands, conducted by the Emigration Commissioners at the expense of colonial and public funds, during the year 1868 - - - - 59

No. 8. Table showing the details of the emigration conducted by the Emigration Commissioners at the expense of colonial and public funds, during the years 1862, 1863, and 1864 - - - 62

No. 9. Similar return for the years 1865, 1866, and 1867 - - 66

No. 10. Summary return for the years 1847 to 1867 - - - 70

No. 11. *New South Wales.*—Table showing the number and particulars of the ships and emigrants despatched by the Emigration Commissioners at the expense of colonial funds in 1868, and up to 31st March 1869 - - - - - - 72

No. 12. *Victoria.*—Similar returns - - - - - - 74

No. 13. *Western Australia.*—Similar returns - - - - - 77

No. 14. *Natal.*—Similar returns - - - - - - 78

No. 15. *Falkland Islands.*—Similar returns - - - - - 79

COLOURED EMIGRATION.

No. 16. *Mauritius.*—Summary of immigrants introduced in each year since the immigration from India was re-opened in 1843 - 80

No. 17. *Mauritius.*—Statement showing the number of immigrants who have embarked for India from 1st January 1849 - - 81

No. 18. *West Indies and Mauritius.*—Return of immigrants and liberated Africans introduced in each year, from 1843 to 1867 - - 82

Page

No. 19. Return of immigrants and liberated Africans who have returned to their own countries from the British West India colonies and Mauritius, and (as far as can be ascertained) the amount of earnings remitted through Government agency in their behalf, from 1843 to 1867 - - - - - 86

No. 20. *West Indies.*—Return of ships and emigrants despatched from Calcutta to British Guiana and Trinidad, during the season 1867-68 - - - - - - - 87

No. 21. *West Indies.*—Return of ships and emigrants despatched from Calcutta to Jamaica, British Guiana, Trinidad, and St. Vincent during the season 1868-69 - - - - - 88

No. 22. *West Indies.*—Return of ships and Coolies (entitled to back passages) despatched from the West to the East Indies from 1850 - - - - - - - - 90

MISCELLANEOUS.

No. 23. Return showing the amounts of money remitted by settlers in North America from 1848 to 1868 - - - - - 91

No. 24. Table of the mortality in sailing ships that cleared from Liverpool for the United States during the year 1868 - - - 92

No. 25. Table of the mortality in steam ships that cleared from Liverpool for the United States and Canada during the year 1868 - 93

No. 26. Table of the mortality in passenger ships that cleared from the Clyde during the year 1868 - - - - - 100

No. 27. Table of the mortality in passenger ships that cleared from Londonderry in 1868 - - - - - 103

No. 28. Summary return of the mortality in sailing and steam vessels to the United States, British North America, and Australasia in 1868 - - - - - - - 103

No. 29. Table showing the number of passenger ships and emigrants despatched in 1868 from the United Kingdom, the number of such ships wrecked or destroyed at sea, and the number of lives so lost, so far as at present known - - - 104

No. 30. Table showing the number of passenger ships and Emigrants despatched from the United Kingdom, the number of such ships wrecked or destroyed at sea, and the number of lives so lost, so far as known, from 1847 to 1868, both inclusive - - 106

HONG KONG.

No. 31. Ordinance (No. 12 of 1868) for repealing the "Hong Kong Emigration Ordinance, 1867," and for better securing the health and protection of emigrants in Chinese passenger ships clearing from Hong Kong - - - - - - 107

MAURITIUS.

No. 32. Ordinance (No. 31 of 1867) to consolidate and amend certain of the laws relating to Indian immigrants and other labourers within this colony and its dependencies, and to make better provision for the protection of claims for wages; and for other purposes - - - - - - - 110

No. 33. Regulations for Ordinance No. 31. of 1867 - - - 128

Page

TRINIDAD.

No. 34. Ordinance (No. 10 of 1868) with regard to immigrants - - 147

GRENADA.

No. 35. Act (No. 390 of 1868) to provide for the payment of bounties to resident Indian immigrants, and for prolonging their term of service - - - - - - - - 149

BAHAMAS.

No. 36. Salt Ponds. Government Notice (19 Dec. 1867) relative to the conversion of leasehold into freehold tenure - - - 150

SOUTH AUSTRALIA.

No. 37. Act (21 of 1867) to amend the laws relating to the leasing for pastoral purposes of certain waste lands of the Crown in the province of South Australia, and for other purposes - - 151

No. 38. Act (23 of 1867) to repeal "The Mineral Leases Act of 1862," and to make other provisions for the leasing and occupation of the waste lands of the Crown in the province of South Australia for mineral purposes - - - - - 166

No. 39. Act (14 of 1868) further to amend the "Waste Lands Act" - 173

LABUAN.

No. 40. Lease of coal mines, &c. to the Oriental Coal Company (Limited), dated 11th March 1869 - - - - - 187

TWENTY-NINTH GENERAL REPORT

OF THE

EMIGRATION COMMISSIONERS.

My Lord, 4th May 1869.

We have the honour to submit herewith our Annual Report on Emigration from the United Kingdom.

In the Appendix will be found the usual Tables showing the progress of emigration from 1815 to the end of 1868, the number and description of emigrants in 1868, and the ports from which and to which they sailed. The result is, that while the average emigration during the 54 years from 1815 to 1868 inclusive has been 120,345 a year, and during the 10 years ending with 1868, 170,150 a year, the emigration in 1868 was 196,325. The emigration in 1867 having been 195,953, the increase during the year was only 372.

Emigration, 1815 to 1868. Appendices 1 to 6.

But the following table will show that since 1863 the real emigration from the United Kingdom has been rapidly falling off, and that its apparent magnitude has been kept up by the great increase in the number of Foreigners who now emigrate through the United Kingdom. The numbers have been—

Decrease in emigration from the United Kingdom.

Year.	English.	Scotch.	Irish.	Foreigners.	Not distinguished.	Total.
1863	61,243	15,230	116,391	7,833	23,061	223,758
1864	56,618	15,035	115,428	16,942	4,877	208,900
1865	61,345	12,870	100,676	28,619	6,291	209,801
1866	58,856	12,307	98,890	26,691	8,138	204,882
1867	55,494	12,866	88,622	31,193	7,778	195,953
1868	58,268	14,954	64,965	51,956	6,182	196,325

It will be seen that the Foreigners, who in 1863 formed only 3 per cent. of the whole emigration, amounted in 1868

Increase in the emigration of Foreigners.

to more than 26 per cent. These Foreigners consist principally of Germans, Swedes, Danes, &c., who are brought from German and Dutch ports to Hull, and thence carried by railroad to Liverpool, where they embark for the St. Lawrence or New York. Their general destination is the Western States of the Union, where they have formed populous settlements. During the past two years they have been healthy, but it was among them that the Cholera broke out in 1866, and they were the principal victims of it both at Liverpool and at sea.

Decrease in the Irish emigration.

Another striking feature in the emigration is the large decrease both absolutely and relatively in the number of Irish emigrants. Excluding Foreign emigrants and those whose origin is not stated, the result during the last six years is as follows:—

Year.	No. of Emigrants.	No. of Irish.	Per-centage of Irish.
1863	192,864	116,391	60·34
1864	187,081	115,428	61·69
1865	174,891	100,676	57·56
1866	170,053	98,890	58·15
1867	156,982	88,622	56·45
1868	138,187	64,965	47·02

Money remitted from America for assisting emigration of friends. Appendix No. 23.

As the remittances from America both in the shape of prepaid passages and money amounted in 1868 to 530,564*l.*, or nearly as much as in 1867, and much more than in the preceding six years, it may be taken for granted that the decrease in the number of emigrants did not arise from want of means to pay passages. It more probably arose from the gradual improvement in the condition of the people, which the large emigration of previous years could scarcely fail to effect.

Emigration to the United States. Number of Irish emigrants.

Of the whole number of emigrants 155,532 or 79·22 per cent., and of the Irish 57,662 or 88¾ per cent. went to the United States. This is a rather smaller proportion than in 1867, but larger than in 1866, and preceding years. The Irish who proceeded to other places than the United States were 7,303. Of these 3,692 went to British North America, of whom a portion would no doubt eventually find their way to the States.

Emigrants carried to North America in steam and sailing vessels.

The whole number of emigrants to the United States and British North America amounted to 176,594. Of whom 164,513 or 93·16 per cent. went in steam vessels, and only 12,081 in sailing ships. The proportion of the emigrants to America who go in steamers has increased every year.

In 1863 it was 45·85 per cent.
1864 „ 53·55 „
1865 „ 73·50 „
1866 „ 81·16 „
1867 „ 92·86 „
1868 „ 93·16 „

The comparative shortness of the voyage and the better accommodation in these vessels give them an undeniable advantage as compared with sailing vessels. But as the price of passage is from 30 to 50 per cent. more than in sailing vessels, the general resort to them shows that the emigrants are not in extreme poverty. The remittances from America to which we have before referred prevent that. In Appendix No. 23. will be found the usual return of those remittances so far as we are able to ascertain them. The total, it will be seen in the 21 years from 1848 to 1868 inclusive, amounts to 14,967,568*l.*, but we must repeat that this return is unavoidably imperfect, and that the sums actually sent home are probably much larger.

Mortality in steam and sailing vessels. Appendices Nos. 24. to 28.

The emigration to America during 1868 was healthy and safe. The tables in the Appendix show that the whole number of deaths among 7,324 emigrants who went in sailing ships was 47, and of 154,277 who went in steam vessels was 108. Assuming the length of voyage of a sailing ship at 35 days and of a steam vessel at 16 days, this would be equal to a mortality per annum of 66 per 1,000 in sailing ships and of 15 per 1,000 in steam ships. The mortality in sailing vessels however was almost exclusively in one vessel, the Emerald Isle, which sailed from Liverpool in June last. If that vessel were excluded the result would be a mortality in sailing ships of 10 out of 6,453, which according to the above calculation would be equal to a mortality per annum of 16 per 1,000. This must be regarded as very satisfactory, considering the class from which a large majority of the emigrants are drawn. In regard to safety, the only serious accident we have heard of occurred to the American ship "Isaac Webb," which was struck by a heavy sea off Sandy Hook, and her decks completely swept. The master was so much injured that he died, and five of the passengers are also said to have died from exposure. In the Appendix will be found a return of the wrecks of Passenger ships and the consequent loss of life in 1868, and a similar return for the 22 years from 1847 to 1868 inclusive.

Accidents at sea. Appendices Nos. 29. and 30.

Emigration to Australia and New Zealand.

The emigration to Australia and New Zealand comprised 12,809 persons, being 1,657 less than in 1867, and the smallest emigration since 1847. The average emigration of

the 20 years between 1848 and 1867 inclusive was 40,717; the greatest number being in 1852, when no less than 87,881 emigrants proceeded to those colonies; the smallest in 1867, when the number was only 14,466. Of the emigrants of 1852 and the succeeding years a large portion were selected and sent out by this Board.

Government emigration. Appendices Nos. 7. to 15.

Emigration by means of Colonial funds has been confined during the past year almost entirely to persons nominated in passage warrants issued by the Colonial Government of Victoria, and to single women selected by ourselves. We were unable from want of funds to despatch any ships during the first five months of the year, but between the 8th of June and the 23d of November we despatched six vessels, carrying altogether 2,787 souls. In pursuance of the wishes of the Colonial Government we made arrangements in November for handing over the emigration to the Agent General for Victoria on the 1st of December last. But as Mr. Verdon subsequently informed us that he was not prepared to undertake it, we continued, in order to prevent loss and delay to the holders of passage warrants, and inconvenience to the colonists, to engage vessels, and fill them with the required classes of emigrants. In consequence, however, of later advices from the Colony, the conduct of future emigration to Victoria will be transferred to the Colonial agent on the 1st of next month.

Transfer of conduct of emigration to Victoria to agent general of the colony.

Government emigration to New South Wales suspended.

New South Wales does not at present promote immigration by means of its public funds; and the emigrants (520) we sent out to Sydney last year were the holders of remittance certificates dated previous to the 14th of December 1867, when the issue of these documents was stopped by the Colonial authorities.

No emigrants selected for passages to South Australia in 1868.

The Legislature of South Australia passed a vote for the purposes of immigration in 1868, but no emigrants were selected for passages to Adelaide last year. We have recently sent out, viâ Melbourne, a few persons who had previous outstanding claims for passages to this colony.

Emigrants despatched to Western Australia.

To Queensland.

To Western Australia we have sent out 140 emigrants, of whom 109 were adult females. The cost of this emigration is defrayed out of the parliamentary vote.

Emigration to Queensland was renewed in the autumn, under the arrangements of the Colonial Government, by which passages on payment of about half the cost are granted to married couples and single men, and free passages to single women. We understand that since the renewal of the emigration two ships only had, up to the beginning of last month, been despatched to Queensland, conveying 485 passengers in all. Of these 159 paid full passage money;

103 were assisted; and 115 only, principally domestic servants, received free passages.

To New Zealand.

The assisted emigration to New Zealand has been confined to the provinces of Auckland, Wellington, Canterbury, and Otago. The number of emigrants despatched by the emigration agents in this country to the several provinces has been:—

To Auckland - - -	6
To Wellington - - -	186
To Canterbury - - -	557
To Otago - - -	552
	1,301

Occupations of emigrants.

In Appendix No. 6. the occupations of the emigrants are given so far as they can be ascertained from the passenger lists. The only noticeable feature in the return is a considerable increase in the number described as "miners and quarrymen," which in 1868 was about one third more that in 1867. A large number of these miners were Germans or Swedes, proceeding to the United States. There was also a rather larger proportion than usual of children under 12 years of age.

Emigration during the first three months of the years 1863 to 1868.

Before concluding this portion of our Report it may be interesting to add to it a statement of the emigration of the first three months of the present year as compared with the emigration during the same period in the six preceding years. During the first three months of the present year there left the United Kingdom—

English.	Scotch.	Irish.	Foreigners.	Not distinguished.	Total.
10,830	2,622	9,654	6,550	619	30,275

Of whom there went to—

United States.	British North America.	Australian Colonies.	Other places.
26,900	47	2,713	615

In the preceding six years the numbers were—

Year.	English.	Scotch.	Irish.	Foreigners.	Not distinguished.	Total.
1863	8,773	1,841	21,451	857	4,884	37,806
1864	10,761	2,143	24,410	3,113	610	41,037
1865	8,685	1,736	13,811	2,530	751	27,513
1866	10,735	1,610	20,672	5,416	1,239	39,672
1867	7,733	1,130	13,648	3,156	1,086	26,753
1868	7,676	1,855	11,794	3,909	752	25,986

Of whom there went—

Year.	United States.	British North America.	Australasia.	All other Places.
1863	24,900	128	11,930	848
1864	32,275	78	7,168	1,516
1865	17,865	114	8,004	1,530
1866	32,913	100	6,067	592
1867	24,079	73	2,019	582
1868	23,528	57	1,319	1,082

The most striking circumstance in this return is the decrease both absolute and proportionate in the number of Irish emigrants, which for the first time is less than the number of English. During the last month, however, the Irish emigration has largely increased, and the information we have received leads us to expect that for the remainder of the year it will equal, if not exceed, the emigration of recent years.

PASSENGERS' ACTS.

Passengers Acts.

Assimilation of the passenger laws of the countries in Europe from which emigrants proceed to the United States with the laws of that country.

No alteration has been made in the Passengers' Acts during the last year. A question has, however, been raised whether it would not be expedient to assimilate the passenger laws of the countries of Europe from which emigrants proceed to the United States to the law of that country, so as to avoid collisions on their arrival, which expose ship-owners and masters to penalties, and produce misunderstandings and complaints.

The principal points on which the law of the United States differs from our law are the superficial space to be allowed to each passenger, the size of berths, the age at which children count as adults, the dietary to be issued,

and the mode of issuing it. In the Session of 1868 a bill for the amendment of the United States Passengers' Act was introduced into the Senate, and was subsequently modified to bring it more in accordance with the Passengers' Acts of this country; but it was not pressed, pending the correspondence on the subject with Her Majesty's Government. As we have not heard that the bill was re-introduced during the last session, we presume that the question has for the moment been laid aside. If the bill were passed as amended, there would be little difference as regards the fitting and provisioning of ships between the British and United States laws.

But a more important question in connexion with the Passenger laws both of this country and the United States is the mode of enforcing their provisions during the voyage. So far as regards the fitting and provisioning of ships, every precaution can be taken before a ship sails, and even if the laws are not assimilated, there is no contradiction between the requirements of the United States and the British laws, and no hardship, therefore, in requiring shipowners who carry emigrants to the United States to comply with the United States law as well as with ours. This was done in former years when the bulk of the emigrants went in United States ships, and it might equally be done now that British ships have taken their place. But the difficulty of enforcing that part of the law which relates to the maintenance of discipline and morality, the protection of the emigrants, especially the young women, and their general good treatment on the voyage, is a more serious matter. When almost all the emigrants were carried in American ships the masters, on their arrival in United States ports, were liable to United States tribunals for anything done or omitted on the voyage. Now that the emigrants are carried principally in British ships the masters are amenable only to British tribunals, and could not legally be prosecuted before the United States Courts for acts committed at sea. But for any misconduct of the master or officers on the voyage, the witnesses must, as a general rule, be the emigrants who would be in the United States. The result is, that in this country where there is jurisdiction there are no witnesses, in the United States where there are witnesses there is no jurisdiction. Between the two, a master of a British vessel may count pretty confidently on impunity, so far as the law is concerned, whatever his neglect or illtreatment of his passengers on the voyage.

We believe that in point of fact the substitution of steamers for sailing ships has very much lessened the risk of misconduct on the part of the masters or crew. The shortening of the voyage, the improvement of the ships, and the continuity of their employment in the carriage of emigrants, are all in favour of greater regularity and a more careful discipline. Nevertheless, it cannot be denied that the want of a means of enforcing the provisions which the law has made for the protection of emigrants is a great defect. Two modes of remedying it might be adopted; first, it might be decided to subject British passenger ships to United States law for matters done on the voyage, or second, evidence taken before a magistrate in the United States might be allowed to be used in a prosecution in this country.

The objections to the first mode are that it involves a waiver of the right of jurisdiction, which might be objectionable in a political point of view, and might form an embarrassing precedent, and that it would subject British masters and shipowners to penalties in some cases more severe than are imposed by the British law for the same offence, and to a mode of procedure much more expensive and vexatious. Under such circumstances it could scarcely fail to produce ill blood, and the Government would be continually called upon to protect British subjects against what would be represented as partial and unfair treatment on the part of the United States authorities. The second mode, though we know of no precedent for it in penal proceedings, would be analogous to the course frequently adopted in civil proceedings—would not involve any surrender of national rights—and would avoid the risk of creating misunderstandings and ill-feeling. But it could be adopted only if Congress were willing to establish a tribunal to take evidence in such cases, and if Parliament would pass an Act to allow evidence so taken to be used in prosecutions in this country. Whether either of these measures is likely to be agreed to, it is not for us to say.

A third course has in former years been suggested, viz., that a bond should be taken from the owner or charterer of a passenger ship, to be enforced against him unless the consul at the port at which he arrives should give a certificate that no misconduct or infraction of the law had occurred on the voyage. We believe this course, however, to be impracticable. Even if the United States Government were willing to acquiesce in such an arrangement, the consul would have no power to compel the attendance of witnesses or to take evidence on oath; and in cases of complaint the

master would be able to allege with plausibility, and often with truth, that while those who had an ill feeling against him, possibly for the enforcement of discipline on the voyage, would remain to make their complaint, those who might contradict their evidence would refuse to be detained at the port for that purpose. We do not see how a consul could under these circumstances discharge such a duty with satisfaction to himself or advantage to the public service.

During the year the following prosecutions took place under the Passengers' Acts: Prosecutions under Acts.

Place.	Party prosecuted.	Nature of Offence.	Result of Prosecution.
Liverpool	Thomas Tighe	Breach of 66th and 75th Sections.	Fined 50*l.* or three months' imprisonment.
London	John Moxon Moore	Breach of 75th Section.	Fined 10*l.* or one month's imprisonment.
	J. S. Garden	Breach of 25th Section.	Case dismissed.
	Master of the "Vimeira"	Breach of 102d Section.	Fined 25*l.*
Cork	Patrick Ahern	Breach of 75th Section.	Fined 1*l.*

The amounts recovered for emigrants through the intervention of the Emigration Officers were as follows: Amounts recovered through the intervention of Emigration Officers.

	£	*s.*	*d.*
Liverpool	111	6	9
London	20	2	0
Clyde	37	10	0
Cork	2,277	8	3
Londonderry	7	0	0
	£2,453	7	0

INDIAN EMIGRATION.

The number of Indian emigrants introduced into Mauritius during 1868 was 2,608; but we have received returns only of two ships which were despatched in the first six months of the year, carrying 528 emigrants. The deaths in these ships on the voyage were 3, equal to a mortality of ·56 per cent. The number that sailed for British Guiana in the season 1867–68 was 3,001, to which must be added 20 born on the voyage, making a total of 3,021. The number Coolie emigration to Mauritius.

West Indies, number of coolies despatched to, in 1867-68. Appendix No. 20.

Mortality on the voyage.

of deaths was 109, equal to a mortality of 3·60 per cent. The number that sailed for Trinidad was 1,840, to which must be added 16 born on the voyage, making a total of 1,856. The number of deaths was 54, equal to a mortality of 2·90 per cent. There was no emigration to any other West Indian colony. The result is that the whole number of emigrants despatched to the West Indies, including births on the voyage, in the season 1867–68 was 4,877. The whole number of deaths 163, equal to a per-centage of 3·34.

Numbers despatched in 1868-9 to British Guiana.

During the season 1868–69 which has just closed there have been despatched to British Guiana 11 ships, carrying 4,560 emigrants. The arrival of 5 has been reported. The number of emigrants embarked, including those born on the voyage, was 2,123. The deaths were 115; equal to a mortality of 5·41. To Trinidad 5 ships have been despatched, carrying 1772 emigrants. The deaths in 3, of which the arrival has been reported, were 24 among 1,144 emigrants, equal to a mortality of 2·09 per cent. To Jamaica 3 ships have been despatched, carrying 1,426 emigrants. We have heard of the arrival of only one of these, in which 463 emigrants were embarked at Calcutta and 3 were born on the voyage. The deaths were 15, equal to a mortality of 3·21 per cent. The result, so far as we are at present informed, is, that among 3,734 emigrants despatched from India or born on the voyage there were 154 deaths, equal to a mortality of 4·12 per cent. This is an increase as compared with the season 1867–68. Since 1864–65, when the mortality was equal to 16·36 per cent., in consequence of the prevalence among the emigrants to British Guiana of a very malignant fever, the mortality has been—

Mortality.

To Trinidad.

Mortality.

To Jamaica.

Appendix No. 21.

In 1865–66, 7·95 per cent.
1866–67, 4·13 „ „
1867–68, 3·34 „ „
1868–69, 4·12 „ „

Proportion of females to males in Indian emigration to the West Indies.

The question as to the proportion of females to be required in the emigration received much consideration during the past year. It had been under the consideration of the Government of Bengal in 1865, and was referred to the Home Government by the Government of India early in 1866. The Home Government decided that the proportion should in future be 50 females to every 100 males, or 33⅓ per cent of the whole emigration. In January 1868 the Indian Government accordingly put out a notice to that effect. This notice immediately met with strong remonstrance from the authorities on the spot, who declared it to be impracticable to obtain so large a proportion of females

without drawing upon the lowest and most degraded class in Calcutta. The Indian Government in consequence suspended its operation, and sanctioned the temporary despatch of vessels with the previous proportion of $33\frac{1}{3}$ females to 100 men, or 25 per cent. of the whole number. In deference to the opinions of the local authorities the Duke of Buckingham, after much consideration, consented to reduce the proportion of females at first to 45 and subsequently to 40 to 100 males; his Grace also allowed such ships of the season as had been engaged under an impression that the proportion would be continued at $33\frac{1}{3}$ to 100 to be despatched with that proportion, but as regarded the future his Grace left the proportion at 40 to 100.

This proportion has since been adopted by your Lordship also, but to avoid the risk of compelling the agents to fill up the complement with a low class of women, your Lordship has consented to allow the agents to despatch ships with less than the prescribed proportion on condition that the proportion is completed before the close of the season, or, if not, that the deficiency is made up in the first ships of the following season, and in the latter case that the number of males be kept down till the proportion is restored. With this modification, and with a better system of recruitment in India, there seems no reason to doubt the practicability of procuring the required complement of females. The events of the season just closed confirm this. Notwithstanding the difficulty so much insisted on at its commencement, the agent for British Guiana was able to despatch 1,289 females to 3,271 males, equal to 39·4 per cent.; the agent for Trinidad, 536 females to 1,236 males, equal to 43·3; and the agent for Jamaica, 440 to 986, equal to 44·6 per cent. The importance of a large proportion of females has been so often explained, and is indeed so obvious, that it is unnecessary to say anything upon it here.

CHINESE EMIGRATION.

Emigration from China to the West Indies continues still suspended. As the Chinese Government refused to modify the stipulations in the convention of March 1866, in respect to back passages, Her Majesty's Government determined to declare the convention altogether null for want of ratification, and to demand that emigration should be replaced on the footing on which it stood under the regulations of the allied commanders before that convention. A communication to that effect was made to the Chinese Government by Her Majesty's

Emigration from China to the West Indies suspended.

minister at Peking, but although the Chinese Government did not deny that the convention was thereby annulled, so far as the British Government was concerned, they absolutely refused to sanction emigration under the old arrangements, and without their sanction no emigration house could be opened, or emigration carried on. There seems, however, some reason to hope that eventually they will not insist on the back passage stipulations where the contract is not for more than five years, a modification which would sufficiently meet the views of British planters.

Emigration from Macao.

During the past year a great change has been made in the conduct of emigration from Macao. The abuses by which that emigration was disgraced have heretofore been the subject of continual complaint by the Chinese Government, and of repeated remonstrances with the Government of Portugal. The answer was a general denial of the complaints, and a reference to the regulations under which the emigration was carried on. No practical redress was obtained; and the result was repeated outbreaks of the Chinese population, in which the most revolting outrages were perpetrated on the crimps employed by the Macao passage brokers, and those who were supposed to be in league with them. Recently, however, a new Governor of Macao has been appointed, Vice Admiral Antonio de Souza, who has addressed himself earnestly to the correction of the abuses so long complained of; and with that view has issued a set of regulations which if enforced strictly and in good faith will render them impossible hereafter. It is too early yet to pronounce confidently on the effect of the new regulations, but there seems reason to believe that the Macao Coolie brokers have received a conclusive check, and it is said that they contemplate transferring their operations to some other port. In any other port, however, they will be subject to the control of the Chinese authorities, who, if they are sincere in their determination to protect their subjects, will not be without the means of doing so. Nor will it be a small advantage that at any other port the operations of the brokers will be subject to the scrutiny of the Foreign Consuls as well as of the Chinese authorities.

Regulations issued for the correction of abuses.

Number of Chinese introduced into Cuba.

By a return received from Her Majesty's Consul at Havana in the month of May last year, it appears that in the 18 months between September 1866 and April 1868 there had been introduced into Cuba 17,721 Chinese, making with those previously introduced 96,581 souls, among whom were only 52 women; that the expense to the importer averaged $225 a head, while the sale of the contract averaged $374, giving a profit of $149, or about 66 per cent. The profit

Expense of importation.

therefore on those introduced during the 18 months must have been nearly 51,000*l.*, or about 1,000*l.* a ship.

In the month of October last an Ordinance was passed by the legislature of Hong Kong to repeal the emigration Ordinance of 1867 and re-enact it with certain modifications. We print a copy of this Ordinance in the Appendix.

Emigration Ordinance of 1868. Appendix No. 31.

MAURITIUS.

The number of immigrants in Mauritius on 31st December 1867 was,—

Immigrants in colony.

Males.	Females.	Total.
149,099	75,703	224,892

The proportion of females to males was therefore 50·83 per cent. The decrease during the year had been,—

Proportion of females to males.

Males.	Females.	Total.
16,454	4,706	21,157

of which 3,048 was the excess of departures over arrivals, and 18,109 the excess of deaths over births.

In the beginning of 1868 the Government of Madras, in consequence of the continued prevalence of fever in Mauritius, suspended emigration to the colony from that port. The fever however having considerably abated as the year went on, the prohibition was taken off in the month of July.

The total Indian immigration into Mauritius for the year ended the 31st December last was, as we have before stated, 2,608, of whom 1,968 were males and 640 females. The departures from Mauritius for the same period were 1,880 males and 664 females.

Indian immigration in 1868. Appendices Nos. 16. to 19.

In our report of last year we alluded to certain measures, then under the consideration of the Secretary of State, for bringing the old immigrants in the colony who are not employed on estates under the supervision of the police. It was stated that there were large numbers of these immigrants without any means of honest livelihood, who congregated in filthy huts in out of the way places, and were ever ready for deeds of violence. To bring these people under control an Ordinance was passed requiring old immigrants to register themselves and to obtain passes from the protector and the police, which they are bound to produce, on demand, to any magistrate or police officer. They are further required to report themselves to the chief of the police in the district in which they reside, and to declare any change of residence. There are other provisions to enable the police to ascertain whether an old immigrant has any honest means of subsistence, and to detect any false representations on his part.

Ordinance for the amendment of the laws relating to Indian immigrants and other labourers.

This law is no doubt of an unusual and stringent character, subjecting as it does the old immigrants not employed on estates to a control which in this country has been applied only to men under tickets of leave. The opinions, however, of those on the spot with the best means of judging were so decided and unanimous as to the necessity for such a law that it was allowed to go into operation. We have not yet received any report as to its operation. We print the Ordinance, (No. 31 of 1867,) and certain regulations issued under it, in the Appendix.

Regulations issued under the above Ordinance. Appendices Nos. 32. and 33.

Number of male Immigrants on estates.

On the 30th June 1868, the number of male labourers employed on estates was 68,170, being a decrease as compared with 31st December 1867 of 2,025. The number employed by job contractors had on the contrary increased from 3,434 to 3,929, a result for obvious reasons undesirable. The number of Creoles of Indian descent had increased, which the Protector attributes to the regulations against vagrancy in the law above referred to. There had also been the large increase from 97 to 1,014 of the number of women employed on estates. The condition of the camps and hospitals was said to be good, notwithstanding the devastation caused by the hurricane that visited the island in the early part of the year, and on the whole the reports may be considered as very satisfactory.

Condition of camps and hospitals.

Slaves from Mozambique.

In the month of July, 17 Mozambique slaves who had been landed at Diego Suarez in Madagascar arrived in Mauritius, having been handed over to the British Consul in Madagascar by the Queen. The Governor of Diego Suarez had also been suspended, and was to be brought to trial for his negligence in the matter. No stronger or more satisfactory proof can be given of the determination of the Queen of Madagascar to observe the stipulations of Her treaty with Her Majesty's Government for the suppression of the slave trade. The people on their arrival in Mauritius were placed under indentures for five years in domestic service at the same scale of wages and allowances as Indian immigrants.

Immigration from Reunion.

Some correspondence has recently taken place in regard to the encouragement offered by the Government of Mauritius to the immigration of time expired Indian immigrants from Reunion. It appears that some time ago the Government of Reunion authorized Major Andrews to seek recruits for Mauritius from among the Indians in Reunion who had completed their industrial service, and had demanded their back passages, and were therefore regarded as lost to the colony. This limitation appears not to have been clearly understood, and Major Andrews' operations

were extended to all time-expired Indians in the Island. Complaint ensued on the part of the planters, and remonstrance on the part of the Government. The result is that the emigration of Indians from Reunion to Mauritius, except at their own expense, will in future be discouraged, if not absolutely stopped, by the Governments of both islands, The effect on the position of the Indians is to be regretted, inasmuch as there is little probability that any will be able out of their own means to pay for passages to Mauritius, while the circumstances of the planters in Reunion are not such as to secure them continuous and remunerative employment.

Resignation of permanent surgeons in immigration service.

In our Report for 1866 we described the arrangements made for the appointment of permanent surgeons for the service of emigrant ships between India and Mauritius. That arrangement came to an end in the month of October last, the three gentlemen who remained on the establishment having resigned their appointments. This is much to be regretted, as there has always been a difficulty, from the shortness of the voyage and the comparatively low remuneration, in obtaining competent surgeons for Mauritius ships.

JAMAICA.

Number of emigrants despatched from India in 1868-69.

Early in 1868 Mr. Anderson was appointed Emigration Agent in India for Jamaica. The number of emigrants he was required to procure was 1,272, and the number he actually sent was, as we have stated, 1,426. His operations appear to have been well conducted and successful, and he was able to accompany his emigrants by a larger proportion of women than the agents for British Guiana or Trinidad. He exceeded in fact, as has been seen, the prescribed proportion of 40 females to 100 males, having despatched 440 females to 986 males; moreover the women included in his emigration are described by him as of a superior class, a portion of them, at least, being drawn from the up country.

Law for laying a duty upon persons possessing certain descriptions of land.

A law was passed in the autumn session of the Legislative Council of Jamaica for laying a duty upon persons possessing certain descriptions of land. This duty, which is in substitution for the land registration tax of one penny an acre, amounts to 3*d.* an acre on land cultivated in canes, coffee, ginger, &c., of 1½*d.* on land in guinea grass, of ¾*d.* on pasture and pimento land, and of ¼*d.* on land in ruinate or wood. All persons liable to the tax are required to make, annually, a return of each description of land in their possession.

BRITISH GUIANA.

Number of emigrants despatched from India in 1868-69.

The number of emigrants applied for by the planters in British Guiana in the season of 1868–69 was 5,000 Indians and 800 Chinese. The number sent, as already stated, has been only 4,560 Indians. The opposition of the Chinese Government has made it impossible to obtain any emigrants from China.

Immigrants in colony.

The number of immigrants in British Guiana on 30th June last is stated by the immigration agent to have been—

	Males.	Females.	Total.
Indentured	26,555	8,410	34,965
Not indentured	4,906	3,247	8,153
	31,461	11,657	43,118

The number actually employed on estates is stated by the government in a despatch dated 31st August last to have been in 1867, 42,366. If this return is correct the number working on their own account, or employed in the towns or otherwise withdrawn from agriculture, is only 752 or $1\frac{3}{4}$ per cent. So small a deduction appears almost incredible.

Results of Immigration.

The results of immigration have been very satisfactory. In 1857, with an immigrant population on sugar estates of 16,826, the exports were—

Sugar	58,726 hogsheads.
Rum	26,734 puncheons.
Molasses	7,105 casks.

In 1867, with an immigration population, as above stated, of 42,366, the exports were—

Sugar	82,726 hogsheads.
Rum	25,345 puncheons.
Molasses	24,033 casks.

The comparison would have been still more favourable with the sugar crop of 1866, which amounted to 91,580 hogsheads.

But it is not in the mere increase of produce that the benefit of immigration is most evident. Before it was set on foot there were constant strikes of the labourers on an estate, always of course at the moment when their labour was most essential. Now the indentured labourers on each estate are sufficiently numerous to prevent any serious calamity from the abandonment of work by the Creole labourers, and strikes have in consequence ceased.

Creole labourers working on estates.

The governor calculates that there are at least 20,000 Creole labourers working on estates, many of them small pro-

prietors in adjacent villages. They constitute, therefore, one third of the labouring population of the colony. The Indian and Chinese labourers appear to be well treated and cared for, and to be contented and prosperous. During the first six months of 1867 (the latest return we have) 2,765 immigrants, of whom 485 were Chinese, entered into renewed engagements, and received in bounty $137,075.

Renewal of engagements by immigrants.

Great difficulty is experienced in draining the east coast of the county of Demerara, which is the principal sugar district. Most of the estates have been compelled to procure draining engines, and the combined Court have consented to advance loans for the further erection of such engines. It is calculated that the produce from drained land is four times that from undrained.

Drainage of the county of Demerara.

TRINIDAD.

The number of emigrants ordered for Trinidad in the last season was 1,800; the number actually despatched, as stated above, was 1,772. The people, so far as we have reports, appear to have been well treated on the voyage, and the ships to have been well adapted to the service, and properly fitted and provisioned.

Number of immigrants despatched from India in 1868-69.

We have no late return of the number of immigrants in Trinidad. The number in September 1866 was 15,500, since which there have been introduced 6,350 Indians and 1,650 Chinese, while 300 Indians have returned to India. Assuming that the births among the Indians equal the deaths, the number of immigrants in the island would be about 23,200. The effect of the immigration on the progress of the colony is shown in the increase of its exports. Taking sugar alone, as the example, it appears that there was exported—

Immigrants in colony.

Results of immigration.

	Cwt.
In 1852 - -	- 483,857
In 1862 - -	- 687,300
In 1867 - -	- 752,892

being an increase in 15 years of 55·60 per cent.

We have recently chartered a vessel to carry back to India 300 coolies whose time has expired. An ordinance "with regard to immigrants" was passed by the legislature in the spring to rectify some unimportant defects in the emigration law. We print a copy of this ordinance in the Appendix.

Return coolies.

Immigration Ordinance of 1868.

Appendix No. 34.

In former reports we have described the scheme which it was intended to adopt for the suppression of squatting in Trinidad. The principle of that scheme was the removal of unimproving squatters, but the sale to the better class on

Scheme for the suppression of squatting and the sale of Crown lands.

favourable terms of the land on which they were settled. Considerable progress has been made in carrying this scheme into operation in the Ward Union of Montserrat. Mr. Mitchell, to whom its introduction was intrusted, reported in the spring of last year that at that date 408 squatters had applied for 5,533 acres, in plots ranging from 3 to 120 acres, that 2,117 acres of hitherto unoccupied land had also been applied for, and that 942 acres had been actually purchased and the purchase money paid. The whole extent of land applied for or purchased was therefore 8,592 acres; the amount actually realized by sales up to the beginning of April was about 1,300*l.* By a later report, dated in February last, it appears that the whole amount received up to that date was more than 3,700*l.*; that considerable progress had been made in establishing two villages; that six new roads had been opened; four large bridges and nine small ones built; and that the bridge over the Guaracaro River was nearly completed.

Of the people who had paid for their lands there are:—

Africans - - - -	10
Spaniards - - -	32
Indian immigrants - - -	35
	77

The rest are said to be Europeans or Creoles. The Indian immigrants form themselves into small communities within easy distance of estates where they can obtain employment.

Altogether the progress made by Mr. Mitchell appears to be very satisfactory, and the Governor speaks in high terms of his exertions.

It is to be inferred from Mr. Mitchell's report that the extent of land actually occupied by squatters exceeded considerably the calculation made by the late Governor, since the occupied land that had been applied for in the single district to which Mr. Mitchell's operations had been confined was so large, and there are other districts in which there are said to be numerous settlements of squatters.

As a complement of the scheme in respect to squatters an ordinance was passed by the Trinidad legislature "to "amend and consolidate the laws with regard to the "removal of persons from Crown lands." The object of this ordinance is to simplify the process by which squatters who do not purchase the lands on which they have established themselves may be removed. With this view it provides that

on information that any person is in possession of Crown land without probable claim, the stipendiary magistrate may issue his summons, and unless the person informed against shall satisfy the magistrate that he or those under whom he claims had a probable title, the magistrate is to make an order for his removal. Any such person not showing that he holds his land by inheritance, devise, or purchase—that is, being an original not a derivative squatter—may also be imprisoned for a period not exceeding six months. The ordinance, however, can be put into operation only by the surveyor general or his assistant, or the warden of the ward in which the land in question is situated, which is a sufficient protection against its being made use of vexatiously to harass those who come within its provisions.

Mode of selling lagoon or swampy lands.

A question has recently arisen as to the mode of selling lagoon or swampy lands. In December 1857 Lord Taunton authorized the sale of lagoon lands at 10*s.* an acre. This authority was understood by the local government to imply that such lands might be sold by private contract, without being put up, as other lands are required to be, to public auction. There seems no reason to suppose that Lord Taunton intended to withdraw these lands from public competition, and there are evident reasons why it should not be done. It was therefore decided by your Lordship's predecessor that although there was reason to make a difference between the upset price of lagoon and ordinary country lands, there was no justification for a difference in the mode of sale; lagoon lands will accordingly be disposed of in future by auction only, in the same way as other lands.

Ordinance for abolishing the Court of Intendant, and regulating the sale of Crown lands.

Ordinance for facilitating the plantation and settlement of Crown lands.

In the month of October last, two ordinances were introduced into the legislature by the Acting Governor and passed, the first "for abolishing the Court of Intendant, "and regulating the sale of Crown lands," the second "for "facilitating the plantation and settlement of Crown lands." The Governor (the Hon. A. Gordon) was at the time on leave in this country, and the Acting Governor and the Legislative Council were under an impression that these ordinances were in accordance with the views which he entertained on the subjects to which they referred. That, however, was not the case, and on the ordinances being referred to him, Mr. Gordon pointed out several provisions objectionable in themselves, and opposed to arrangements, for which he had already obtained the sanction of the Secretary of State, for the improvement, instead of the abolition, of the Court of Intendant. Under these circumstances the Duke of Buckingham decided not to submit the ordinances for Her Majesty's confirmation; but to allow the matter to

remain in suspense until Mr. Gordon, who was on the point of returning to his government, should have had an opportunity of reconsidering it. We have not since heard that any fresh steps have been taken in the matter.

SAINT VINCENT.

Condition of coolies.
Number under indenture.
Mortality.

The condition of Indian immigrants in Saint Vincent is satisfactory. The number of immigrants working on estates on 1st January 1868 was 695 ; the births in the year were 41, and the deaths 19. The mortality was therefore 2·58 per cent. per annum. The number on estates on the 31st December was 717. The people were working well, and the number sent to gaol had been only fifteen, of whom eight were for breach of contract, four for using threats, one for assault, and two for debt.

Coolies despatched from India in 1868-69.

The emigration agent at Calcutta was directed to despatch 300 emigrants to Saint Vincent during the past season. We have recently received intelligence that he accordingly despatched the "Imperatrice Eugenie" on 13th March with 241 male and 108 female emigrants, equal to 313 statute adults on board.

GRENADA.

Immigrants in colony.

No emigrants were introduced into Grenada in 1868. On the 1st January 1868 the number of immigrants in Grenada was 1787, there were 53 births during the year, making a total of 1830. On the 31st December the number was 1,702. Of the remainder, 76 had returned to India in the "Lincelles," 3 had emigrated to British Guiana, and 49 had died. The mortality was equal therefore to 2·67 per cent. in the year.

Return of coolies to India per "Lincelles."
Mortality.

Appendix No. 22.

The "Lincelles," which had been chartered by us to take return coolies from Grenada and Saint Lucia, sailed from Grenada in the month of November, having on board :—

Men	40
Women	19
Boys	6
Girls	6
Infants	5
	76

These immigrants deposited 804*l.* 14*s.* in the treasury for transmission to India, besides paying 82*l.* 14*s.* 6*d.* for warm clothing, and 87*l.* 10*s.* for services commuted, &c. They also took with them 424*l.* in specie, and jewelry valued at 48*l.*, making a total of 1,439*l.* 18*s.* 6*d.*, equal to a fraction less than 36*l.* a head for the male adults.

Money deposited by immigrants for transmission to India.

In July last an Act was passed by the legislature of Grenada "to provide for the payment of bounties to resident "Indian immigrants, and for prolonging their term of "service." This Act authorizes the payment out of immigration funds of a bounty of 10*l.* to every able-bodied man or woman, and of 5*l.* to every able-bodied child between the age of 10 and 14 years, who after completing 10 years service shall be willing to be re-indentured for a further term of five years The right to back passage at the expiration of the additional term is reserved. We print a copy of this Act in the Appendix.

Act for the payment of bounties to Indian emigrants, and for prolonging their term of service.

Appendix No. 35.

SAINT LUCIA.

The number of Indian immigrants in Saint Lucia on 30th June 1868 was 1,079, of whom 902 were resident on estates, and 145 not resident, leaving 32 unaccounted for. The number of births during the half year had been 10, the number of deaths 11, or a fraction over 1 per cent. Of those who were entitled to back passages 425 commuted their claim for bounty money to the amount of 3,097*l.* Two hundred and twenty-two of these persons subsequently emigrated to British Guiana and Trinidad.

Immigrants in colony.

Mortality.

Commutation by coolies of right to return passage.

In November the following immigrants returned to India in the "Lincelles" with the emigrants from Grenada, viz.—

Return of coolies to India per "Lincelles."

Men	180
Women	56
Boys	23
Girls	12
Infants	27
	288

The amount deposited with the Government for remittance to India by 119 of these immigrants was 2,397*l.* 18*s.* 8*d.*, equal to 20*l.* 3*s.* a-piece, in addition to which some are said to have had considerable sums with them. All had paid for their warm clothing, blankets, &c., sums amounting in the whole to upwards of 200*l.*

Money deposited by immigrants for transmission to India.

ST. KITTS AND ANGUILLA.

No immigrants have been introduced into St. Kitts from India since 1861.

Settlement of claims to land in Anguilla.

In our report last year we explained the provisions of an Act recently passed by the legislature of St. Kitts for the settlement of claims to land in Anguilla. That Act, though beneficial in its general provisions, was open to the objection that it treated with too little consideration the rights of absentees, minors, married women, and incompetent persons. This objection having been pointed out by the Duke of Buckingham, an amending Act has been passed, prolonging the time and extending the area within which notice of applications for grants must be given, and saving the rights of minors, married women, and incompetent persons.

BAHAMAS.

Salt ponds.

Conversion of leasehold into freehold tenure.

Appendix No. 36.

In execution of the decision of the Duke of Buckingham to commute the leasehold tenure of salt ponds in the Bahamas for a perpetual export duty on salt, to which we alluded in our report of last year, the Government issued a notice stating the terms on which the commutation would be made. We place a copy of this notice in the Appendix. It is dated 19th December 1867, but was not received in time to be printed with our report of last year.

Claim of inhabitants of the Island of Eleuthera to the land on which they are settled.

A question has arisen as to the claim of certain inhabitants of the Island of Eleuthera to the land on which they are settled. In 1787 the Earl of Dunmore, the then Governor, assigned to certain persons a tract of about 1,100 acres at Spanish Wells in the Island of Eleuthera as a reward for assistance given in the recovery of New Providence from the Spaniards. Similar tracts were at the same time assigned for similar services to five other parties: one in Harbour Island, and the rest in Eleuthera. One of these tracts in Eleuthera was, as far back as 1791, divided among the settlers at a nominal quitrent; another, that at Harbour Island, was in 1842 granted to the heads of families among the settlers as tenants in common.

An application for a similar grant was in 1842 or soon after made by the Spanish Wells people, but in consequence of the disapproval by the Secretary of State of what had been done at Harbour Island was not acceded to. In 1862 and again in 1864 the people renewed their application, which appears to have been so far entertained by the local govern-

ment that they were allowed to deposit a considerable sum towards the purchase of the land; but the grant was arrested by the remonstrance of Mr. Burnside, who as magistrate at Harbour Island had seen the disadvantage of the similar grant there.

In 1867 the people applied for a grant to one of themselves in trust for the whole body. This application the Governor refused, and also a proposal of the Attorney General which he considered to be substantially the same as the tenure at Harbour Island. Instead of this the Governor proposed to divide the land among the people and issue separate grants for each lot. The people, however, refused the arrangement, and asked for a return of the money deposited by them in 1862 and 1864. The money was accordingly returned to them.

The objections to the grant of this land to the settlers as tenants in common are so obvious that it is difficult to understand how the settlers can be anxious to obtain it on such a tenure. At the same time it is impossible, so long as they continue in the same mind, to compel them to accept any other, and as it would be unjust after so long a possession to remove them, there seems no alternative but to allow the land to continue for the present as it has been heretofore. Probably in the course of a few years they may become alive to the disadvantage of a tenure which would favour the powerful among them at the expense of the poor and weak, and may be willing to obtain the land on a tenure better calculated to promote their own welfare and to forward the progress of the colony.

HONDURAS.

Tenure of land.

The tenure of land in Honduras has so repeatedly been under discussion of late years that it may be useful briefly to recapitulate the circumstances connected with it.

The first settlements of British subjects in Honduras, about the middle of the 17th century, were mere encroachments on Spanish territory, not only unauthorized, but strongly resented, and repeatedly expelled by Spain. About the middle of last century Spain began to take a more favourable view of such settlements, and they were recognized by the Treaty of Paris in 1763. By the subsequent Treaty of Versailles in 1783 the privileges of the settlers were extended to the cutting of mahogany, and after the outbreak of the war with Spain, in 1796, the settlers assumed the right, which up to that time had been refused by Spain, to cultivate what land they pleased for provisions. During

the whole of this period, and up to the year 1817, the only regulations in force, in respect to the tenure of land, were such as were framed, in the first instance by the general body of the settlers, and after 1787 by a committee of the settlers, consisting of 13 persons chosen from the general body by ballot. These regulations, on the face of them, professed to convey only the right of cutting logwood and mahogany. But it is stated in the report of a commission, appointed by the Superintendent, Colonel Arthur, in 1820, that a title founded on the regulations established by the settlers in 1765 and 1766 was held "to convey an absolute freehold to "the possessor, and that the judicial courts of this settle- "ment admit the validity of such titles, and authorize the "property, whether possessed by original location, by "purchase, or by bequest, to be taken and sold under "execution."

This system continued till 1817. In that year Earl Bathurst instructed Colonel Arthur to undertake the duty of making regulations for the occupation of lands, and not to permit any occupation without his previous sanction. We are not aware what regulations Colonel Arthur made nor what extent of land was alienated under them. Finally in 1839 the Marquis of Normanby authorized the superintendent to make regulations for the sale of land at an upset price of 1*l.* an acre. No land, however, was sold under this authority.

Lands acquired under the local regulations, previous to 1817, were known as "locations," those acquired under Colonel Arthur's regulations as "grants."

In 1855 an Act was passed by the Legislature (18 Vict. c. 22.) to declare the laws in force within the settlements. By the 2d section of this Act "all rules, orders, and reso- "lutions regulating locations of logwood and allotments "of land" made prior to 1817 are declared valid and binding so far as regards titles which have been recorded; and by sect. 3. all such locations which had been held in quiet and undisturbed possession since the 1st January 1840 were to be held good against any but infants or persons under disability. This Act, which had been reserved for the Royal assent, was confirmed by the Home Government. In his report upon it Sir W. Stevenson, the then superintendent, observed, that "whatever may have been their "primary object and limit, the gradual changes that "have taken place have produced such corresponding "increase of power over the soil itself as to have invested "the locatees and those claiming under them with absolute "dominion over the located lands." . . . "The lands have

" always and particularly within the last half or quarter of " a century been dealt with as estates in fee simple, and as " such have been sold, mortgaged, settled, devised, and " allowed to descend without any idea of their being any- " thing less than absolute ownerships."

Under the system thus described it could not be but that the extent of land which passed into the hands of private individuals should be very large. Accordingly it appears that from the Rio Hondo, which forms the northern boundary of the colony, to the River Siburne, which falls into the sea to the south of Belize, almost the whole land is in the hands of private individuals, principally in those of Messrs. Young and Toledo and the British Honduras Company. South of the Siburne the bulk of the land is in the hands of the Crown. The terms on which the Crown land is to be disposed of are still under the consideration of the local legislature; but it may be taken for granted that they will be eventually settled on a liberal basis, so as not to discourage the influx of emigrants from the neighbouring continent, which has already made some progress.

Immigration from the United States.

To this immigration we referred in former reports, describing the measures adopted by the predecessor of the present Lieutenant Governor of the colony to encourage it. Those measures were not generally approved by the Secretary of State, nor were their results important. Nevertheless an immigration of United States citizens took place, and they settled themselves on land obtained from private proprietors. The principal settlement is at a place called " Toledo," where there were in October last 91 persons, including women and children, and 32 more expected.

The whole number in the colony the Lieutenant Governor states at 284. They appear to be industrious, hard-working people, are doing well, and are contented with their position and prospects. The climate is said to be good, but the excessive number of insects is a great drawback. The survey of a large tract in the southern part of the colony lying between the Moho River and the Rio Grande and between the Rio Grande and the Middle River had been undertaken by Captain Dwight of the Confederate Engineers, under directions from Messrs. Young and Toledo, the owners of the land. The work is said to be of the severest kind, every step having to be cut through the forest with cutlasses. The results of this partial survey and its expense do not encourage the expectation that it will be possible, within any definite time, to undertake a general survey of the colony.

Act for the encouragement of agricultural and other labourers.

An Act was passed by the legislature in April 1868 to encourage the immigration of agricultural and other labourers. By this Act a bonus is offered not exceeding 5*l.* for each adult, and 3*l.* 6*s.* 8*d.* for each child under 16 years of age, introduced into the colony under an engagement of service for three years. The Act, however, did not specify, nor did it, as is done by the similar Acts in other colonies, give the Lieutenant Governor power to define, the countries from which immigrants may be introduced. There would therefore have been a risk of the promotion of immigration from places from which it might be inexpedient to obtain immigrants. The approval of the Act has in consequence been suspended until this defect is supplied.

Chinese immigrants in colony.

In previous reports, especially in that for 1867, we have stated the result of the Chinese emigration to Honduras, which took place in 1865. The whole number of Chinese landed in the colony was 474. Of these 100 deserted from the estates of the British Honduras Company in 1866 under the circumstances described in our report for 1867, and took refuge among the Santa Cruz Indians, and 55 more deserted afterwards. The whole number now in the colony is only 211, the number that had died is 108. This large mortality occurred almost exclusively within the first year after the arrival of the people. Since that the deaths have been comparatively few.

Of those who remain, 193 are on five estates, and are described by the immigration agent as working well, in good health, and happy and contented; of the remainder 17 have obtained release from their indentures, and are working on their own account, and one is in a lunatic asylum.

It is clear therefore that there is no reason why Chinese should not succeed in Honduras as well as elsewhere, if they are justly and kindly treated. At the same time it is not probable that a renewal of this immigration will be desired by the colonists, or permitted by the Home Government.

NEW SOUTH WALES.

The land revenue of New South Wales during the year 1868 was— Land revenue.

	£	s.	d.
Land sales	236,518	5	2
Balances of conditional purchases	10,601	17	5
Interest of land sales to conditional purchasers	18,129	10	4
Rent of land, 1st class settled districts	19,708	12	8
Rent of runs, 2nd class settled and unsettled districts	227,822	2	9
Assessment on runs, 2nd class settled and unsettled districts	13,007	2	5
Fees on transfer of runs	1,192	0	0
Quitrents	158	15	0
Survey of land	5	0	0
Licences to cut timber, &c. on Crown lands	1,713	4	3
Mineral leases	4,443	0	5
Leases of auriferous lands	1,300	6	8
Miners' rights	5,331	15	0
Business licences	501	0	0
Miscellaneous services	796	11	0
	£541,229	3	1

This was a decrease as compared with 1866 of 3,831*l.* 5*s.* 5*d.*

The gold revenue during the year was— Gold revenue.

	£	s.	d.
Duty on gold	16,398	13	1
Fees for escort and conveyance of gold, &c.	8,360	6	1
	£24,758	19	2

being a decrease as compared with 1866 of 572*l.* 16*s.* 9*d.*

The total revenue proper in 1867 and 1868 was— Revenue of 1867 and 1868.

	£	s.	d.
1867	2,073,841	11	4
1868	2,045,356	15	2
Showing a decrease of	£27,484	16	2

The amount for 1868 is exclusive of 25,000*l.* due by the Government of Victoria on Murray River Customs account, to 31st December 1868.

Immigration and emigration.

We have received no returns of immigration and emigration, or of the progress of the colony in agriculture or commerce, of later date than for 1867, an abstract of which was given in our report of last year.

Emigration to San Francisco.

Early in the year some complaint arose among persons who had emigrated from New South Wales to San Francisco upon an undertaking by the United States Consul at Sydney that they should receive remunerative employment on the Central Pacific Railway. On their arrival the consul's undertaking was repudiated by the agent of the railway, and it seems clear that he had acted without sufficient authority. Employment, however, was eventually found for the people, and the necessary communications were addressed to the United States Government, and to the Government of New South Wales, to prevent any further misapprehension as to the authority of the United States consul at Sydney in the matter.

QUEENSLAND.

Land sales.

The land sales in Queensland in 1867, the latest date for which we have returns, were:—

———	Extent.	Amount realized.
	Acres.	£
By public auction - - - -	40,229	48,335
By pre-emptive purchases - -	640	640
Mineral sections - - - -	740	383
Improvement allotments - - -	4	270
24 Vict. No. 15, sec. 16 - - -	152	208
	41,765	49,836
Leased under Act 30 Vict. No. 12 -	40,540	5,096

Compared with 1866, there was a decrease of 71,833 acres in the quantity sold, and of 91,488*l.* in the amount realized. The average price also, it will be seen, was somewhat lower in 1867, having been 1*l.* 4*s.* 10*d.* in 1866 and 1*l.* 2*s.* 10*d.* in 1867. In lands leased there was an increase as compared with the previous year of 9,160 acres in extent, and 2,291*l.* in the rent.

Lands leased.

Immigration.

As regards immigration it appears from returns recently

received that there arrived in this colony during the first six months of 1868 —

Males.	Females.	Total.
5,983	645	6,628

while there left the colony during the same period— Emigration.

Males.	Females.	Total.
2,845	639	3,484

The increase therefore by excess of immigration over emigration was—

Males.	Females.	Total.
3,138	6	3,144

The population on 30th June 1868 was estimated at— Population.

Males.	Females.	Total.
63,478	40,757	104,235

The small number of female immigrants as compared with male, and the disproportion of the sexes in the colony, is a matter much to be regretted, and deserves the serious attention of the local government.

Act to consolidate and amend the laws relating to the alienation of Crown lands.

In the month of February 1868 an Act was passed by the legislature "to consolidate and amend the laws relating "to the alienation of Crown lands." The principal provisions of this Act are as follows: By the Pastoral Leases Act of 1863 it was provided (section 44) that the whole or any portion of a run might be resumed for sale or otherwise on twelve months' notice. The Act of 1868 directs that the necessary notice shall be at once issued to all holders of runs within the settled districts, which are specified in a schedule, but tenants who surrender their runs within six months are allowed to receive back a lease for ten years of one half of what will remain after deducting township and railway reserves; the land so leased is not to be subsequently resumable, except by resolution of both Houses of Parliament. The rent to be paid by the tenant for the half run is to be the same as he before paid for the whole, but he is to have a right of pasturage over the whole so long as the resumed half is not required for sale or otherwise. Tenants who do not accept the above compromise are to be permitted to retain their runs, but subject, on 12 months' notice, to free selection of the whole by purchasers, or to resumption for sale by auction. Unlet country lands in the settled districts are to be at once open for selection, and similar lands in the unsettled districts are to be open for selection as "second class" pastoral lands.

The Governor is authorized to make town and other reserves, and to reserve all lands required for public pur-

poses; and it is provided that all Crown lands within three miles of a railway shall be held as railway reserves. The Governor is also authorized to divide lands not previously divided into counties and parishes. Lands on which improvements to a specified amount have been made may be sold to the person who has made the improvements by private contract.

Sales may be made for mining purposes, other than for gold, to an extent not exceeding 640 nor less than 40 acres, at a price to be fixed by the Governor, not less than 1*l.* an acre, one fourth of the price to be paid down and the balance within 12 months.

Country land comprised in railway or township reserves, or in reserves made under the Agricultural Reserves Act of 1863, is to be open for selection by conditional purchasers. It is to be divided into (1) Agricultural; (2) First Class Pastoral; (3) Second Class Pastoral; and to be purchaseable at the rate of 15*s.*, 10*s.*, and 5*s.* an acre respectively, payable in 10 equal annual instalments, in addition to survey fees. The extent to be so acquired is, of agricultural land from 40 to 640 acres; of first class pastoral land from 80 to 2,560 acres; and of second class pastoral land from 80 to 7,680 acres. Where, however, the land has not been surveyed, applications for it are to be received conditionally only, till there has been an opportunity of ascertaining its quality. Lands selected under this system are to be held on lease till the purchase money is paid, on condition, among other things, that the lessee shall enclose the land with a substantial fence, and that he shall reside on it continuously during the period of the lease. But if within two years in the case of pastoral lands, or three years in the case of agricultural, the lessee can show that he or his bailiff have resided on the land for two years, and have made certain improvements, a grant in fee may be issued on payment of the balance of purchase money. Any person intending to cultivate sugar or coffee is to be allowed to select a block containing not less than 320 nor more than 1,280 acres, and on proof within three years that he has brought one tenth of his land into cultivation he is relieved from the obligation of residence. Existing lessees of sugar or coffee lands are to be entitled to the same privilege.

Heads of families and persons of 21 years of age are allowed to select as "homesteads" lots not exceeding 80 acres of agricultural or 160 acres of pastoral land on payment of 9*d.* per acre for the former and 6*d.* per acre for the latter during five years; the grant not to issue till the expiration of that period, and proof of continuous residence and culti-

vation of one tenth of the land, or the erection round it of a substantial fence, to be required. No person is to be allowed to acquire more than one "homestead" allotment.

The Governor is authorized to proclaim commons on the application of a certain number of freeholders of an adjoining township; such commons to be proportioned to the number of freeholders resident in the adjoining township, but in no case to exceed 20 square miles. The commonage rights are to be restricted to residents in the adjoining township. Sheep, except under special circumstances, are to be excluded, and cattle are to be paid for at the rate of 2*s.* a head per annum.

But, besides the above modes of conditional sale, it is provided that unconditional sales may be made by auction of town, suburban, and country lands at such prices as the Governor shall fix, not less than—

For town lands - - -	8*l.* per acre.
Suburban lands within one mile -	1*l.* „
Do. beyond one mile - - -	15*s.* „
Agricultural lands - - -	15*s.* „
1st class pastoral lands - -	10*s.* „
2nd class - - - -	5*s.* „

The time of sale and the price of the lands are to be duly advertised beforehand. The sales are to be conducted by an auctioneer or land agent appointed by the Governor, and the purchase money is to be paid, one fifth at the time of sale, and the remainder, with the deed and survey fees, within one month. Country lands not sold at the auction may be afterwards sold by private contract at their respective upset prices.

Every member of the volunteer force of the colony is to be entitled, after five years service from the date of the Act, to a free grant of 10 acres of suburban or 50 acres of country land, subject to regulations to be made from time to time by the Governor, and laid before the Legislature.

Licences may be issued under regulations to be made by the Government for the cutting of timber and the digging of gravel, brick earth, &c. on Crown lands and lands held under pastoral lease; but in respect to pastoral lands any reasonable objection on the part of the lessee is to be considered by the Government.

Lastly, provision is made for the punishment of trespassers, for the preservation of boundary marks, for the prevention of frauds, and for other similar purposes.

An Act was also passed during the same session "to amend the Immigration Act of 1864," by extending the time for the return of land orders deposited under the ninth

Act to amend the Immigration Act of 1864.

section of that Act upon repayment of the sum advanced by the Government.

Immigration of South Sea islanders.

In former reports we have alluded to the correspondence which has taken place on the subject of the introduction into Queensland of natives of the South Sea Islands, to be employed in the cultivation of cotton. The papers have been since printed for Parliament, and we shall therefore notice very briefly what has recently been done in the matter.

Number introduced.

The number introduced in the first instance was only 382, of whom 78 returned to their homes at the end of the first year. As, however, the experiment had been successful, and it seemed probable that more might be introduced, the Duke of Buckingham suggested to the Governor that a Bill should be introduced into the Legislature to restrict and regulate the immigration. The provisions which his Grace suggested were similar to those adopted by the Legislature of Queensland for the regulation of immigration from the East Indies.

Act for the regulation of this immigration.

Before his Grace's despatch could be received, the Legislature had anticipated his suggestion, and had passed an Act, which was afterwards somewhat altered and extended, embodying the provisions which he had pointed out as necessary. The principle of those provisions was to place the introduction of South Sea Islanders, and the terms of their contracts, under the control of the Local Government. With this view it prohibited the introduction of these people, except under a non-transferable licence previously obtained from the Government, and except after inspection of the people on their arrival, and of the contracts made with them, by a Government officer.

The Act was met on its arrival in this country by a comprehensive protest from the British and Foreign Anti-Slavery Society, who denounced it as unconstitutional and illegal, and called on Her Majesty's Government to disallow it. As, however, the effect of disallowing it would have been simply to leave the immigration unregulated, the Duke of Buckingham only suspended the signification of Her Majesty's pleasure until further information was obtained. As the Act had been assented to by the Governor and was in operation, the delay in signifying Her Majesty's pleasure was of no importance. In a report dated in May 1868 from the Acting Governor, it is stated that the employment of South Sea Islanders continued to give satisfaction to the settlers in the colony who had engaged them, and that the men themselves were industrious, contented, and happy. Up to the date of the

Acting Governor's despatch no complaint of their ill-treatment had been made to the emigration agent, under whose charge they are placed by law.

VICTORIA.

We have no returns as to sales of land, or the revenue derived from them, or of the general progress of the colony of Victoria during 1867 or 1868. The only returns which have reached us relate to the goldfields. They show that in the month of August last there were in the several mining districts— Land sales.

European miners - -	46,289
Chinese miners - - -	15,908
Total - -	62,197

Number of miners on the gold fields.

The estimated value of the mining plant was 2,108,936*l.* The extent of auriferous ground under work was 811 square miles. Value of mining plant.

SOUTH AUSTRALIA.

The sales of Crown lands in South Australia in 1867 were— Land sales.

	A.	R.	P.
Town lands - - -	72	1	38
Special country lands -	6,058	0	0
Country sections -	69,906	0	0
Country lands -	67,984	0	9
Making a total of	144,020	1	38

The amount realized was 163,787*l.* 4*s.* This was a large decrease as compared with the two preceding years, in the first of which 316,477 acres had been sold at the price of 510,268*l.*, while in 1866 214,429 acres had been sold, and had realized 322,429*l.*

The extent of land under lease was 28,101,760 acres, or 43,909 square miles, being an increase as compared with 1866 of 1,316,480 acres, or 2,057 square miles. The total rent was 91,942*l.*, being 746*l.* less than in 1866. The decrease was in the rent payable for annual leases, which, however, forms less than 3 per cent. of the whole extent. In the rent for 14 years' leases there was an increase of 401*l.* Land leased.

Land alienated, and under cultivation.

The total quantity of land alienated up to the end of 1867 was 3,568,742 acres, while the extent under cultivation was 810,734 acres. The extent under wheat had increased from 457,628 acres in 1866 to 550,456. There was likewise an increase in other cereals.

Immigration.

The number of immigrants who arrived in 1867 was:—

Males.	Females.	Total.
2,482	1,169	3,651

Emigration.

The number who left was—

Males.	Females.	Total.
2,815	1,231	4,046

showing a loss to the colony of 395 by the excess of emigration.

Population.

The population on 31st December 1867 was—

Males.	Females.	Total.
89,991	82,869	172,860

being an increase as compared with 1866 of—

Males.	Females.	Total.
1,719	1,988	3,707

Land Acts passed in 1867.

The following Acts passed by the Legislature of South Australia on the subject of lands during the session of 1867 were received after the publication of our report of last year:—

No. 2. An Act to amend the Scrub Lands Act, 1866.

No. 21. An Act to amend the laws relating to the leasing for pastoral purposes of certain waste lands of the Crown in the province of South Australia, and for other purposes.

No. 23. An Act to repeal "The Mineral Leases Act, 1862," and to make other provisions for the leasing and occupation of the waste lands of the Crown in the province of South Australia for mineral purposes.

No. 26. An Act to remove doubts as to the validity of certain payments heretofore made out of "The Public Works Fund" and "The Immigration Fund," and to authorize a further expenditure of money from the said "The Immigration Fund."

In the session of 1868 the following additional Land Acts were passed:—

No. 3. An Act to amend "The Northern Territory Act."

No. 11. An Act to remove doubts as to the validity of the leases of the waste lands of the Crown for mineral purposes heretofore granted, and for other purposes.

No. 12. An Act to amend "The Waste Lands Amendment Act, 1867."

No. 13. An Act for the prevention of frauds at auctions of waste lands of the Crown.

No. 14. An Act further to amend the "Waste Lands Act."

We print in the Appendix the Acts No. 21 and 23 of 1867 and No. 14 of 1868, which are the most important of the above Acts. Appendices Nos. 37, 38, and 39.

In our report of last year we mentioned the despatch to the Northern territory of an exploring party under Captain Cadell to select a site for a town, and the success which had attended their operations. Exploration of Northern Territory.

Since then we learn that the Surveyor General, Mr. Goyder, sailed for the territory in December last with an efficient staff of surveyors and ample field equipments, and that arrangements had been made for reinforcing him in January. It is therefore hoped that the survey may be soon completed and the holders of land orders be put in possession of their land. In the meantime, by the Act to amend the Northern Territory Act above referred to, the time for selecting land has been extended for five years from the passing of the Act (24th November 1868), and the extent of land to be selected is increased from 160 to 320 acres for each land order. It may be presumed that the holders of land orders will accept the doubling of the quantity of land to be assigned to them as a sufficient compensation for the delay that has occurred in putting them in possession. Amendment of Northern Territory Act.

WESTERN AUSTRALIA.

The land sold or held under lease, and the revenue arising from it, in Western Australia in 1868, was as follows :— Land sales.

Sold.	A.	R.	P.	£	s.	d.
Town and suburban lots	447	1	11	1,072	13	4
Country lots	15,783	0	0	8,106	12	6
Pastoral leases	6,361,217	0	0	14,979	12	7
Timber licences	——			389	17	0
Mining do.	——			8	0	0
Miscellaneous receipts	——			178	12	0
	6,377,447	1	11	24,735	7	5

This is an increase as compared with 1867 of 846,559.2.5 acres sold or leased, and of 3,313*l.* 5*s.* 6*d.* in the revenue obtained. The total extent of land, exclusive of town and suburban lands, alienated up to 31st December 1868 was 1,439,342½ Extent of land alienated.

acres. The area still ungranted is estimated at 975,677 square miles, or 624,433,280 acres.

Immigration.

The number of persons who arrived in Western Australia in 1868 was 1,038.

Of these there were—

Convicts - - -	279	
Do. Guards - - -	109	
Government Emigrants - -	129	
Two Companies 14th Regiment -	172	
		689
Other Immigrants - -		349
		1,038

Emigration.

The number of persons who left the colony was 404, or 55 more than the ordinary immigrants who arrived.

Amendment of the law relating to trespass by live stock.

In the session of 1868 the Legislature of Western Australia passed an Ordinance to amend the law relating to trespass by live stock. The object of this Ordinance, which repeals and in substance re-enacts a similar Ordinance of 1867, is to protect pastoral lessees and licencees, by depriving purchasers and tillage and mining lessees within a run of redress for trespasses by the live stock of the pastoral lessee, where the land of the purchaser or tillage or mining lessee has not been properly fenced. The Ordinance is clearly the complement to that part of the land regulations which allows others than the pastoral lessee to obtain land within his run either by purchase or under a tillage or mining licence.

TASMANIA.

Land sales.

The quantity of land sold in Tasmania in 1867 was :—

Description of Lots.	Quantity.	Amount realized.
	A. R. P.	£ s. d.
Country - - - - -	29,584 0 18	23,457 1 7
Town and Suburban - - -	586 3 37 6/10	2,369 12 0

Number of acres alienated.

The number of acres granted or sold up to the end of 1867 was 3,739,766.

Land held under depasturing licence.

The quantity held under depasturing licences was 1,597,063 acres, at a rental of 8,206*l.* 3*s.* 3*d.*

The population on the 31st December 1867 was estimated at 98,455. Population.

The immigration into and the emigration from the colony in 1867 was— Immigration.

Immigration - -	3,559
Emigration - -	4,025

Emigration.

showing a decrease of population by emigration of 466.

In the session of 1868 the Legislature passed an Act "to further amend the Waste Lands Act, 1863." This Act authorizes the sale of agricultural waste lands of the Crown in lots not exceeding 100 acres on credit extending over 14 years; but, to prevent land jobbing, it provides that no one shall acquire more than one lot under these conditions. One half the purchase money is to be applied to the construction of roads in the vicinity of the land; the money to be raised in the first instance by debentures secured on the Land Fund to an extent not exceeding one half the purchase money. Amendment of Waste Lands Act of 1863.

NEW ZEALAND.

The land sales in New Zealand in 1867 were— Land sales.

	A.	R.	P.
Town - -	352	3	22½
Suburban - -	5,102	0	21
Country - -	283,462	2	16
	288,917	2	19½

The amount realized was—

	£	s.	d.
Cash - -	287,416	6	6
Scrip - -	3,013	0	0
	290,429	6	6

Of this amount 100*l.* was received for "special land purchases, South Island," and 246*l.* 13*s.* 6*d.* forfeited deposits. 11,611 acres were also appropriated for public works.

The quantity of waste land disposed of without sale in 1867 was 257,753 acres.

The number of acres held under depasturing and other Number of acres held under

depasturing and other leases.

leases (except for gold mining), and the rents paid for the year 1867, were—

For depasturing purposes.		Mineral and other purposes.	
No. of Acres.	Rents and Assessments.	No. of Acres.	Rents paid.
	£		£
14,701,042	103,525	6,316	398

Population.

The population of New Zealand (exclusive of military), as ascertained by a census taken in December 1867, was—

Males.	Females.	Total.
131,929	86,739	218,668

showing an increase, as compared with the census taken in 1864, of 46,510, or 27·01 per cent.

The imports and exports in 1867 were—

	£
Imports. Imports - - -	5,344,607
Exports. Exports - - -	4,644,678

being a decrease of 550,256*l.* in the imports, and an increase of 124,604*l.* in the exports, as compared with the year 1866.

Gold exported.

The quantity and value of gold exported in 1867 was—

Quantity, 686,753 ounces.

Value.

Value, 2,700,275*l.*

The total quantity exported from the 1st April 1857 to the 31st December 1867 was—

Quantity, 3,746,214 ounces.
Value, 14,540,573*l.*

Income and expenditure.

The income and expenditure for 1867 were—

	£	*s.*	*d.*
Income - -	6,033,323	9	9
Expenditure -	6,254,198	18	0

Immigration. Emigration.

The immigration and emigration in 1867 were—

Immigration - - -	11,126
Emigration - - -	6,267

showing an increase by immigration over emigration of 4,859.

The arrivals were from—

United Kingdom - -	4,460
British Colonies - -	6,284
Other places - - -	382
	11,126

The departures were to—

United Kingdom - -	638
British Colonies - -	5,038
Other places - - -	591
	6,267

Act to make permanent provision for immigration, and other purposes.

During their session of 1868 the General Assembly of New Zealand passed an Act "to enable superintendents and "provincial councils to make permanent provision for "immigration, and other purposes." This Act authorizes the council of any province to appropriate for four years one fourth of the land revenue subject to its control to the selection and conveyance of emigrants to the province from the United Kingdom, or any other place except the Australian Colonies, the unexpended appropriation of one year to be applicable to the service of any other year included in the period fixed by the Act. The superintendent, with the advice and consent of the executive council of the province, if there be one, is to enter into contracts and make rules for the selection of emigrants, and their conveyance to the province, for the nomination of immigrants by persons in the province, and for other purposes of a like nature. Any person making in the colony false statements for the purpose of obtaining a passage for himself or any other person is subjected to a penalty not exceeding 50*l.*, in addition to the price of the passage, and in default of payment to imprisonment not exceeding six months.

CANADA.

Emigration from the United Kingdom in 1868.

We have received no returns of any kind from Canada relating to immigration during 1868. The numbers who left this country for the dominion were 21,024, of whom 20,810 went to the St. Lawrence, 191 to New Brunswick, and 23

to Nova Scotia. Small as this number appears compared with the number that go to the United States, it is larger than the emigration of any year since 1854. The emigration to British North America during the 13 years from 1855 to 1867 inclusive has on an average been only 13,963 a year, while the average of the emigration to the United States during the same period has been 109,964 a year. A certain number no doubt find their way to Canada from the United States; but it has been generally calculated that at least as many find their way to the States from Canada. This is especially the case with Swedish and Norwegian emigrants, who in former years have proceeded in considerable numbers to the St. Lawrence on their way to the Western States of the Union.

Emigration of discharged artizans and mechanics from H.M. dockyards.

Within the last few weeks we have been engaged, in concert with the Lords of the Admiralty, in assisting the emigration to Canada of a number of the artizans and mechanics recently discharged from Her Majesty's Dockyards. The troop ships "Crocodile" and "Serapis" being about to sail for Canada to bring home troops, the Lords of the Admiralty determined to grant passages in them to dockyard and arsenal labourers and their families, provided no pecuniary charge was thereby thrown on the naval estimates. Application was accordingly made to the public for means to meet the expenses of the people, at the rate for the voyage of 2*l.* 5*s.* per statute adult. The necessary sum, amounting in all to 2,295*l.* 10*s.*, was obtained without difficulty, principally through the British and Colonial Emigration Society. The "Crocodile" sailed on the 20th April, having on board—

Number despatched in the "Crocodile."

—	Adults.		Children between 1 and 12 Years.		Infants.		Total.
	M.	F.	M.	F.	M.	F.	
From Portsmouth -	74	40	37	20	1	3	175
„ Woolwich -	101	52	32	24	4	2	215
Total -	175	92	69	44	5	5	390

Number despatched in the "Serapis."

equal to 323½ statute adults. The "Serapis" sailed from Portsmouth on the 1st instant, and from Plymouth on the 3d instant, having on board—

—	Adults.		Children between 1 and 12 Years.		Infants.		Total.
		F.	M.	F.	M.	F.	
From Chatham -	24	6	2	2	—	2	36
„ Woolwich -	207	114	60	58	10	7	456
„ Portsmouth -	78	41	28	32	1	4	184
„ Devonport -	17	4	3	4	1	1	30
Total -	326	165	93	96	12	14	706

equal to 585½ statute adults. Care was taken to select only such as were likely to be able to earn a livelihood in Canada, and no families were accepted the number of young children in which exceeded three under 10 years of age. It is too early as yet to receive intelligence of their arrival and prospects in Canada, but the local government have undertaken to afford them all the facilities in their power to obtain employment.

Emigration from distressed districts of London.

In addition to the emigrants sent out in the "Crocodile" and "Serapis" a considerable number of persons have been assisted by the British and Colonial Emigration Society, and by other benevolent institutions or individuals, to emigrate to Canada from the distressed districts of London and its environs.

BRITISH COLUMBIA.

No emigrants proceeded from the United Kingdom to British Columbia or Vancouver Island in 1868.

Ordinance for the settlement of all outstanding questions relating to the sale of lands for taxes in Vancouver Island.

In December 1867 an Ordinance was passed by the Legislature of British Columbia "to provide for the settlement "of all outstanding questions relating to the sale of land "for taxes in Vancouver Island." This Act was passed to remedy defects of title arising from the irregular way in which sales of land under the Real Estate Tax Acts of Vancouver Island had been conducted, and also to redress the injustice which in numerous instances had been committed by the sale of land on which the taxes had been paid. With this view the Ordinance annuls all sales made under the Real Estate Tax Acts, and orders the money to be repaid

with interest at 24 per cent. per annum. The amount so repaid and subsequently accrued taxes are a primary charge on the land in favour of the Government. This Ordinance after some hesitation was left to its operation on the strong recommendation of the Government and the Colonial Secretary.

Pre-emptive system of land sales.

In the spring of last year the Duke of Buckingham desired the Governor of British Columbia to furnish a report on the working of the pre-emptive system of disposing of land in the colony. Under this system, which, though it prevails largely in the United States, does not exist in any other British Colony, any person may take possession of unoccupied and unreserved country land to the extent of 160 acres, on obtaining a licence from the magistrate of the district. A record of the transaction must be made by the magistrate within seven days on payment of a fee of $2, and when the Government Survey comes up to the land the claimant is entitled, if there has been a continuous occupation, to purchase it at $1 an acre.

Quantity of land disposed of in British Columbia, and in

As to the working of the system the Governor stated that in British Columbia, with the exception of 27,797 acres sold in New Westminster and its vicinity, almost the whole of which remains unimproved, all the farming establishments have been formed on the pre-emptive system; that the number of claims registered is 1,696, of which about 500, comprising 90,000 acres, are actually settled and improved, about 20,000 acres being fenced, and about 6,000 under cultivation. Since 1865 there have been numerous applications to have pre-empted lands surveyed, which had been complied with in the case of 48 farms, comprising 5,289 acres; but in only 20 cases, comprising 2,090 acres, has the purchase money been paid, and the Government have no power of compelling payment. In respect to personal residence the Governor stated that there is some doubt as to the effect of the law in British Columbia, and that residence by a hired agent or servant has been held to be sufficient, but as to the running of boundaries he says that the settlements being very much scattered but few cases have occurred of coterminous lots, and where such cases have occurred there has been no difficulty in adjusting them.

Vancouver Island.

In Vancouver Island about 75,000 acres had been sold by private contract at 20*s.* an acre previous to 1861 in which year pre-emption was established. Under this system 1,013 claims, comprising 132,153 acres, have been recorded, of which 700 claims, comprising about 87,500 acres, have been settled and improved, about 8,500 acres being fenced, and 2,500 under cultivation. There had been no difficulty

in enforcing personal residence in Vancouver Island, but it is to be inferred from the Governor's silence that no pre-emptive lands have been there brought under survey or finally purchased.

CAPE OF GOOD HOPE.

Land Acts passe in 1867.

Two Acts relating to land were passed by the Legislature of the Cape of Good Hope in the month of September 1868, viz^{t}.

No. 23. An Act to amend the Act No. 12. of the year 1867, and

No. 24. An Act to relax the conditions of grants of Crown lands in certain divisions of the Colony.

Act No. 23. repeals so much of the Act No. 12. of 1867 as fixed the rates payable for the depasturage of stock on Crown lands, and authorizes the Governor, with the advice of the Executive Council, to prescribe a tariff for each division of the Colony, and to decide on the number of licences for each district. The reason for this Act is, that the rates fixed by the Act of 1867 are said to be in excess of the amount fairly chargeable in some divisions of the Colony.

Act No. 24. cancels the conditions of personal occupation and provision for the defence of the Colony attached to grants of land in certain of the eastern divisions of the Colony in past years, on the ground that such conditions are irksome and vexatious, and no longer necessary. These Acts have been allowed by Her Majesty.

NATAL.

Land scheme for the encouragement of emigration.

The scheme of emigration to Natal, explained in our report for last year, has continued in operation, but its progress has not been rapid. During 1868 the emigration agent issued 138 land orders, of which there were—

Land orders issued.

To settlers with 500*l.* capital	-	53
„ with 250*l.* „	-	25
„ with 100*l.* „	-	60
		138

Number of persons introduced.

The number of persons introduced into the Colony in virtue of these orders was 230.

Extension of scheme to emigrants from Australia.

The only extension of the scheme during the past year has been the admission of immigrants from Australia to its advantages, and the allowance of location orders to young men of 18 years and upwards, on condition that the grant is not issued to them till they attain 21 years. Latterly, however, the operations of the agent have been necessarily limited in consequence of the reduction of the amount appropriated by the local Legislature to the service.

Immigration from India.

No immigrants were introduced into Natal from India during 1868. Between 1860 and 1867 the number introduced into the Colony was 6,307, and the number of deaths among them in the 7 years had been 275 only. In only one year, 1861, had the mortality exceeded 2 per cent.; the next highest mortality was in 1860, when it amounted to 1·74 per cent. It appears certain from this that the climate of Natal is peculiarly well suited to the Indian labourer.

Discovery of gold in the South African Republic.

Arrival of miners from Australia.

In the course of the year rumours of gold discoveries in Natal and the neighbouring territories of the South African Republic were widely circulated, not only in the colony but elsewhere. The consequence was the arrival in the beginning of the present year of a considerable number of miners from Australia, who announced that large numbers more were preparing to follow them. As up to the present time the quantity of gold discovered in the Colony has been very small, and as it is doubtful whether the reports as to its discovery in the interior are better founded, this influx of miners into a colony which had no means of finding other employment for them was calculated to produce great embarrassment. The Lieutenant Governor therefore lost no time in communicating to the Australian Colonies the real state of the case, but whether the information would arrive sufficiently early to arrest the departure of the expected immigrants we are as yet unable to state. In the meantime some of the miners had proceeded to the interior to ascertain whether any "payable" gold fields exist there.

LABUAN.

Lease of coal mines transferred to Oriental Coal Company (Limited).

In our Reports for 1864 and 1866 we printed copies of the leases of the coal mines of Labuan which had been granted, first to the Labuan Coal Company, and second to the China Steam Ship and Labuan Coal Company, with which the former company had amalgamated. The operations of neither company were successful, and in the month of May

1868 the latter company transferred their interest in the mines to the Oriental Coal Company (Limited). This company, however, were desirous to have some modifications introduced into the lease, to which, after some discussion, the Duke of Buckingham consented. Eventually the lease, of which we print a copy in the Appendix, was executed on the 11th March last. Appendix No. 40.

The modifications introduced into the lease are:

First, an extension of its duration from 21 to 42 years;

Second, a reduction of the royalty on coal from 1*s.* to 6*d.* per ton in consideration of an increase of the fixed rent, after 25th December 1870, from 300*l.* to 1,000*l.* a year; and

Third, the reduction of the royalty on petroleum from 6*d.* per 10 gallons to 2*s.* 6*d.* per 100 gallons. In other respects the lease is substantially a consolidation of the previous leases.

Convicts from Straits Settlements.

In the course of the year about 50 convicts were transferred from the Straits Settlements to Labuan to be employed on public works and in other ways. A portion of these were allotted to the Oriental Company to be employed in loading coals on board ship. They are stated to have worked diligently and willingly, and to have earned three and four times as much as their cost to the public. As far therefore as regards the financial part of the arrangement, it was eminently successful. In other respects also the operations of the company have been satisfactory. For the first time for many years they have realized a clear profit after paying all expenses, the profits in the four weeks ending 5th December last being estimated at more than 100 per cent.

FALKLAND ISLANDS.

Result of new land regulations.

In the Appendix to our Report for last year we printed the regulations which had been recently issued by the local Government in respect to pastoral leases in West Falkland. The effect of those regulations was to remove the limits enforced in the East Falkland Island as to the extent of land to be included in a lease, and as to its duration. The result of these relaxations was that by the month of May 1868 all the available land in the West Falkland had been taken for sheep stations, producing a revenue of upwards of 1,350*l.* a

year. Such a result, considering that 12 months before there was not a settler on the Island, must be admitted to be very satisfactory.

We have, &c.
T. W. C. MURDOCH.
S. WALCOTT.

The Earl Granville, K.G.,
&c. &c. &c.

APPENDIX.

Appendix No. 1.

Total Emigration from the United Kingdom for each of the Fifty-four Years from 1815 to 1868 inclusive.

Years.	North American Colonies.	United States.	Australian Colonies and New Zealand.	All other Places.	Total.
1815	680	1,209	*	192	2,081
1816	3,370	9,022	*	118	12,510
1817	9,797	10,280	*	557	20,634
1818	15,136	12,429	*	222	27,787
1819	23,534	10,674	*	579	34,787
1820	17,921	6,745	*	1,063	25,729
1821	12,955	4,958	*	384	18,297
1822	16,013	4,137	*	279	20,429
1823	11,355	5,032	*	163	16,550
1824	8,774	5,152	*	99	14,025
1825	8,741	5,551	485	114	14,891
1826	12,818	7,063	903	116	20,900
1827	12,648	14,526	715	114	28,003
1828	12,084	12,817	1,056	135	26,092
1829	13,307	15,678	2,016	197	31,198
1830	30,574	24,887	1,242	204	56,907
1831	58,067	23,418	1,561	114	83,160
1832	66,339	32,872	3,733	196	103,140
1833	28,808	29,109	4,093	517	62,527
1834	40,060	33,074	2,800	288	76,222
1835	15,573	26,720	1,860	325	44,478
1836	34,226	37,774	3,124	293	75,417
1837	29,884	36,770	5,054	326	72,034
1838	4,577	14,332	14,021	292	33,222
1839	12,658	33,536	15,786	227	62,207
1840	32,293	40,642	15,850	1,953	90,743
1841	38,164	45,017	32,625	2,786	118,592

* The Customs returns do not record any emigration to Australia during these 10 years, but it appears from other sources that there went out in 1821, 320; in 1822, 875; in 1823, 543; in 1824, 780; and in 1825, 458 persons. These numbers have not been included in the totals of this table.

Years.	North American Colonies.	United States.	Australian Colonies and New Zealand.	All other Places.	Total.
1842	54,123	63,852	8,534	1,835	128,344
1843	23,518	28,335	3,478	1,881	57,212
1844	22,924	43,660	2,229	1,873	70,686
1845	31,803	58,538	830	2,330	93,501
1846	43,439	82,239	2,347	1,826	129,851
1847	109,680	142,154	4,949	1,487	258,270
1848	31,065	188,233	23,904	4,887	248,089
1849	41,367	219,450	32,191	6,490	299,498
1850	32,961	223,078	16,037	8,773	280,849
1851	42,605	267,357	21,532	4,472	335,966
1852	32,873	244,261	87,881	3,749	368,764
1853	34,522	230,885	61,401	3,129	329,937
1854	43,761	193,065	83,237	3,366	323,429
1855	17,966	103,414	52,309	3,118	176,807
1856	16,378	111,837	44,584	3,755	176,554
1857	21,001	126,905	61,248	3,721	212,875
1858	9,704	59,716	39,295	5,257	113,972
1859	6,689	70,303	31,013	12,427	120,432
1860	9,786	87,500	24,302	6,881	128,469
1861	12,707	49,764	23,738	5,561	91,770
1862	15,522	58,706	41,843	5,143	121,214
1863	18,083	146,813	53,054	5,808	223,758
1864	12,721	147,042	40,942	8,195	208,900
1865	17,211	147,258	37,283	8,049	209,801
1866	13,255	161,000	24,097	6,530	204,882
1867	15,503	159,275	14,466	6,709	195,953
1868	21,062	155,532	12,809	6,922	196,325
Total -	1,322,585	4,073,596	956,457	146,032	6,498,670

Average annual emigration from the United Kingdom } From 1815 to 1868 - - 120,345
For the 10 years ending 1868 - 170,150

Government Emigration Board,
8, Park Street, Westminster, 4th May 1869.

S. Walcott.

Appendix No. 2.

Table showing the Ports in the United Kingdom from which Emigrants embarked, the

Port of Embarkation.	United States.	Central and South America.	British North America.						West Indies.					East Indies.	Straits Settlements
			Canada.			Newfoundland.	Prince Edward Island.	Total.	Jamaica.	British Guiana.	Trinidad.	Other Settlements	Total.		
			Canada.	New Brunswick.	Nova Scotia and Cape Breton.										
Cardiff	15	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Falmouth	–	63	10	–	–	–	–	10	–	–	–	–	–	–	–
Liverpool	109,109	1,383	15,511	5	–	6	10	15,532	9	4	–	50	63	17	–
London	3,616	449	771	5	10	10	–	796	47	32	22	121	222	565	9
Maryport	–	–	4	–	–	–	–	4	–	–	–	–	–	–	–
Plymouth	–	–	18	–	–	–	–	18	–	–	–	–	–	–	–
Southampton	49	928	–	–	–	–	–	–	330	211	108	522	1,171	1	–
Swansea	2	61	–	–	–	–	–	–	–	–	–	2	2	–	–
Total, England	112,791	2,884	16,314	10	10	16	10	16,360	386	247	130	695	1,458	583	9
Aberdeen	–	–	90	–	–	–	–	90	–	–	–	–	–	–	–
Glasgow	9,160	31	1,828	181	4	–	–	2,013	10	49	10	4	73	41	3
Greenock	–	–	–	–	–	6	–	6	–	3	–	4	7	–	–
Leith	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Total, Scotland	9,160	31	1,918	181	4	6	–	2,109	10	52	10	8	80	41	3
Cork	25,624	–	–	–	9	–	–	9	–	–	–	–	–	–	–
Dublin	–	–	669	–	–	6	–	675	–	–	–	–	–	–	–
Londonderry	7,957	–	1,909	–	–	–	–	1,909	–	–	–	–	–	–	–
Total, Ireland	33,581	–	2,578	–	9	6	–	2,593	–	–	–	–	–	–	–
Grand Total, United Kingdom	155,532	2,915	20,810	191	23	28	10	21,062	396	299	140	703	1,538	624	12

Government Emigration Board,
8, *Park Street, Westminster, 4th May* 1869.

Appendix No. 2.

mber embarked at each Port, and the Countries to which they emigrated, in 1868.

Japan.	Java.	Mauritius.	Western Africa, St. Helena, Madeira, Malta, &c.	Cape.	Natal.	Mexico.	Falkland Islands.	Sandwich Islands.	Australian Colonies.								Grand Total.
									New South Wales.	Queensland.	Victoria.	South Australia.	Western Australia.	Tasmania.	New Zealand.	Total.	
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	15
–	–	–	7	145	28	–	–	–	–	–	–	–	–	–	–	–	253
–	–	–	417	–	–	–	–	–	10	30	2,703	–	–	–	6	2,749	129,369
4	–	23	15	158	396	–	13	2	574	655	1,706	227	168	18	2,398	5,746	12,045
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	4
–	–	1	6	73	8	–	–	–	655	–	2,086	124	–	–	–	2,865	2,971
–	2	3	21	234	49	69	–	–	76	–	25	–	–	–	244	345	2,872
–	–	–	3	2	–	–	–	–	–	–	–	–	–	–	–	–	70
4	2	27	469	612	481	69	13	2	1,315	685	6,520	351	168	18	2,648	11,705	147,599
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	90
–	1	2	8	–	12	–	–	–	3	–	44	–	–	–	1,055	1,102	12,446
–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	14
–	–	–	–	–	–	–	–	–	–	–	2	–	–	–	–	2	2
–	1	3	8	–	12	–	–	–	3	–	46	–	–	–	1,055	1,104	12,552
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	25,633
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	675
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	9,866
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	36,174
4	3	30	477	612	493	69	13	2	1,318	685	6,566	351	168	18	3,703	12,809	196,325

S. Walcott.

Appendix No. 3.

Table showing the Number of each Sex that emigrated from each to which the

Destination.	FROM ENGLAND.		
	Male.	Female.	Total.
United States	70,745	42,046	112,791
Central and South America	2,032	852	2,884
British North America:—			
Canada: Canada	10,758	5,556	16,314
Canada: New Brunswick	6	4	10
Canada: Nova Scotia and Cape Breton	5	5	10
Newfoundland	11	5	16
Prince Edward Island	6	4	10
West Indies:—			
Jamaica	234	152	386
British Guiana	152	95	247
Trinidad	85	45	130
Other Settlements	499	196	695
East Indies	299	284	583
Straits Settlements	4	5	9
China	94	36	130
Japan	4	-	4
Java	2	-	2
Mauritius	19	8	27
Western Africa, St. Helena, Madeira, Malta, &c.	342	127	469
Cape of Good Hope	356	256	612
Natal	326	155	481
Mexico	59	10	69
Falkland Islands	7	6	13
Sandwich Islands	2	-	2
Australian Colonies:—			
New South Wales	705	610	1,315
Queensland	385	300	685
Victoria	3,748	2,772	6,520
South Australia	200	151	351
Western Australia	44	124	168
Tasmania	11	7	18
New Zealand	1,524	1,124	2,648
Total	92,664	54,935	147,599

Government Emigration Board,
8, *Park Street, Westminster, 4th May* 1869.

Appendix No. 3.

of the three Divisions of the United Kingdom, and the Countries emigrated, in 1868.

FROM SCOTLAND.			FROM IRELAND.			TOTAL EMIGRATION FROM THE UNITED KINGDOM.		
Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
5,577	3,583	9,160	17,422	16,159	33,581	93,744	61,788	155,532
28	3	31	- -	- -	- -	2,060	855	2,915
1,208	710	1,918	1,483	1,095	2,578	13,449	7,361	20,810
111	70	181	- -	- -	- -	117	74	191
2	2	4	5	4	9	12	11	23
5	1	6	2	4	6	18	10	28
- -	- -	- -	- -	- -	- -	6	4	10
6	4	10	- -	- -	- -	240	156	396
41	11	52	- -	- -	- -	193	106	299
7	3	10	- -	- -	- -	92	48	140
7	1	8	- -	- -	- -	506	197	703
31	10	41	- -	- -	- -	330	294	624
3	- -	3	- -	- -	- -	7	5	12
- -	- -	- -	- -	- -	- -	94	36	130
- -	- -	- -	- -	- -	- -	4	- -	4
1	- -	1	- -	- -	- -	3	- -	3
3	- -	3	- -	- -	- -	22	8	30
8	- -	8	- -	- -	- -	350	127	477
- -	- -	- -	- -	- -	- -	356	256	612
12	- -	12	- -	- -	- -	338	155	493
- -	- -	- -	- -	- -	- -	59	10	69
- -	- -	- -	- -	- -	- -	7	6	13
- -	- -	- -	- -	- -	- -	2	- -	2
2	1	3	- -	- -	- -	707	611	1,318
- -	- -	- -	- -	- -	- -	385	300	685
34	12	46	- -	- -	- -	3,782	2,784	6,566
- -	- -	- -	- -	- -	- -	200	151	351
- -	- -	- -	- -	- -	- -	44	124	168
- -	- -	- -	- -	- -	- -	11	7	18
592	463	1,055	- -	- -	- -	2,116	1,587	3,703
7,678	4,874	12,552	18,912	17,262	36,174	119,254	77,071	196,325

S. Walcott.

Appendix No. 4.

A Table of the Amount of Emigration in 1868 from each Port in the United Kingdom at which there is an Emigration Officer, and from all other Ports, showing the general Destination, Status, and Nationality of the Emigrants, and distinguishing Adults from Children.

Port of Embarkation.	Destination.	Age, Sex, &c. of Emigrants.											Native Country of Emigrants.				
		Adults.				Children from 1 to 12 years.		Infants.		Not distinguished as to age.		Total.	English.	Scotch.	Irish.	Foreigners.	Not distinguished.
		Married.		Single.													
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.						
Liverpool	United States	13,389	14,817	40,041	13,459	9,362	8,184	2,685	2,382	2,987	1,803	109,109	37,533	3,461	23,525	39,785	4,805
	British North America	1,829	2,115	6,439	1,490	1,540	1,196	517	385	12	9	15,532	5,951	10	896	8,654	21
	Australasia	228	255	1,222	569	195	210	25	34	7	4	2,749	1,155	325	1,073	185	11
	All other Places	152	178	490	122	116	104	24	20	585	188	1,979	501	123	394	133	828
	Total	15,598	17,365	48,192	15,640	11,213	9,694	3,251	2,821	3,591	2,004	129,369	45,140	3,919	25,888	48,757	5,665
London	United States	459	545	1,352	435	321	318	103	83	- -	- -	3,616	2,569	32	362	653	—
	British North America	138	150	136	56	135	138	23	20	- -	- -	796	634	27	110	25	—
	Australasia	589	711	2,351	1,176	403	378	63	75	- -	- -	5,746	4,256	461	768	261	—
	All other Places	255	299	768	240	139	140	19	27	- -	- -	1,887	1,451	194	52	190	—
	Total	1,441	1,705	4,607	1,907	998	974	208	205	- -	- -	12,045	8,910	714	1,292	1,129	—
Plymouth	British North America	- -	3	5	1	6	3	- -	- -	- -	- -	18	18	—	—	—	—
	Australasia	247	268	817	1,062	206	215	25	25	- -	- -	2,865	1,450	173	1,232	10	—
	All other Places	26	13	41	6	- -	2	- -	- -	- -	- -	88	75	7	1	5	—
	Total	273	284	863	1,069	212	220	25	25	- -	- -	2,971	1,543	180	1,233	15	—
All other Ports	United States	9	8	27	10	6	2	4	- -	- -	- -	66	33	1	- -	32	—
	British North America	2	2	- -	1	4	5	- -	- -	- -	- -	14	10	- -	4	—	—
	Australasia	72	43	148	44	18	17	1	2	- -	- -	345	339	- -	- -	6	—
	All other Places	541	386	1,152	313	191	186	17	3	- -	- -	2,789	2,006	36	20	727	—
	Total	624	439	1,327	368	219	210	22	5	- -	- -	3,214	2,388	37	24	765	—
	Total, England	17,936	19,793	54,989	18,984	12,642	11,098	3,506	3,056	3,591	2,004	147,599	57,981	4,850	28,437	50,666	5,665

GLASGOW	United States	696	696	3,640	1,845	986	828	255	214	-	-	-	9,160	230	6,969	699	1,262	—
	British North America	190	188	860	372	181	155	31	36	-	-	-	2,013	19	1,879	98	17	—
	Australasia	88	90	445	296	80	79	13	11	-	-	-	1,102	1	1,029	68	-	4
	All other Places	7	11	117	13	16	7	-	-	-	-	-	171	33	129	3	6	—
	Total	981	985	5,062	2,526	1,263	1,069	299	261	-	-	-	12,446	283	10,006	868	1,285	4
GREENOCK	British North America	-	-	5	1	-	-	-	-	-	-	-	6	1	1	-	-	4
	All other Places	-	-	7	1	-	-	-	-	-	-	-	8	3	5	—	—	—
	Total	-	-	12	2	-	-	-	-	-	-	-	14	4	6	-	-	4
ALL OTHER PORTS	British North America	12	12	35	5	12	13	-	1	-	-	-	90	-	90	—	—	—
	Australasia	-	-	2	-	-	-	-	-	-	-	-	2	-	2	—	—	—
	Total	12	12	37	5	12	13	-	1	-	-	-	92	-	92	—	—	—
	Total, Scotland	993	997	5,111	2,533	1,275	1,082	299	262	-	-	-	12,552	287	10,104	868	1,285	8
CORK	United States	1,174	2,058	9,850	8,424	1,592	1,366	372	276	347	165	25,624	-	-	-	25,119	5	500
	British North America	-	-	-	-	-	-	-	-	5	4	9	-	-	-	-	-	9
	Total	1,174	2,058	9,850	8,424	1,592	1,366	372	276	352	169	25,633	-	-	-	25,119	5	509
LONDONDERRY	United States	395	454	3,076	2,846	493	460	119	105	4	5	7,957	-	-	-	7,957	—	—
	British North America	168	233	772	451	122	86	45	29	3	-	1,909	-	-	-	1,909	—	—
	Total	563	687	3,848	3,297	615	546	164	134	7	5	9,866	-	-	-	9,866	—	—
ALL OTHER PORTS	British North America	47	63	255	178	61	44	12	15	-	-	675	-	-	-	675	—	—
	Total																	
	Total, Ireland	1,784	2,808	13,953	11,899	2,268	1,956	548	425	359	174	36,174	-	-	-	35,660	5	509
Grand Total, United Kingdom		20,713	23,598	74,053	33,416	16,185	14,136	4,353	3,743	3,950	2,178	196,325	58,268	14,954	64,965	51,956	6,182	

Government Emigration Board,
8, *Park Street, Westminster, 4th May* 1869.

S. WALCOTT.

Appendix No. 5.

Summary of the Amount and Particulars of the Emigration to each of the four general geographical divisions to which emigrants proceeded in 1868.

Destination.	Age, Sex, &c. of Emigrants.										Total.	Native Country of Emigrants.				
	Adults.				Children, from 1 to 12 Years.		Infants.		Not distinguished as to Age.			English.	Scotch.	Irish.	Foreigners.	Not distinguished.
	Married.		Single.													
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.						
To the United States—From ports at which there are Government emigration officers	16,113	18,570	57,959	27,009	12,754	11,156	3,534	3,060	3,338	1,973	155,466	40,332	10,462	57,662	41,705	5,305
Other ports	9	8	27	10	6	2	4	- -	- -	- -	66	33	1	- -	32	—
Total	16,122	18,578	57,986	27,019	12,760	11,158	3,538	3,060	3,338	1,973	155,532	40,365	10,463	57,662	41,737	5,305
To British North America—From ports at which there are Government emigration officers	2,325	2,689	8,217	2,371	1,984	1,578	616	470	20	13	20,283	6,623	1,917	3,013	8,696	34
Other ports	61	77	290	184	77	62	12	16	- -	- -	779	10	90	679	—	—
Total	2,386	2,766	8,507	2,555	2,061	1,640	628	486	20	13	21,062	6,633	2,007	3,692	8,696	34
To Australasia—From ports at which there are Government emigration officers	1,152	1,324	4,835	3,103	884	882	126	145	7	4	12,462	6,862	1,988	3,141	456	15
Other ports	72	43	150	44	18	17	1	2	- -	- -	347	339	2	- -	6	—
Total	1,224	1,367	4,985	3,147	902	899	127	147	7	4	12,809	7,201	1,990	3,141	462	15
To all other places—From ports at which there are Government emigration officers	440	501	1,423	382	271	253	43	47	585	188	4,133	2,063	458	450	334	828
Other ports	541	386	1,152	313	191	186	17	3	- -	- -	2,789	2,006	36	20	727	—
Total	981	887	2,575	695	462	439	60	50	585	188	6,922	4,069	494	470	1,061	828
Summary—From ports at which there are Government emigration officers	20,030	23,084	72,434	32,865	15,893	13,869	4,319	3,722	3,950	2,178	192,344	55,880	14,825	64,266	51,191	6,182
Other ports	683	514	1,619	551	292	267	34	21	- -	- -	3,981	2,388	129	699	765	—
Total	20,713	23,598	74,053	33,416	16,185	14,136	4,353	3,743	3,950	2,178	196,325	58,268	14,954	64,965	51,956	6,182

Government Emigration Board,
8, *Park Street, Westminster, 4th May* 1869.

S. Walcott.

Appendix No. 6.

TABLE showing the Occupations, Sex, and general Destination of the Emigrants in 1868, so far as can be ascertained from the Passengers' Lists furnished by the Custom House Authorities.

Occupation.	United States.	British North America.	Australasia.	All other Places.	Total.
ADULT MALES.					
Agricultural Labourers, Gardeners, Carters, &c.	302	78	488	393	1,261
Bakers, Confectioners, &c.	164	23	36	6	229
Blacksmiths and Farriers	132	3	27	3	165
Bookbinders and Stationers	16	1	9	1	27
Boot and Shoe Makers	285	39	56	4	384
Braziers, Tinsmiths, Whitesmiths, &c.	251	3	16	1	271
Brick and Tile Makers, Potters, &c.	31	—	3	2	36
Bricklayers, Masons, Plasterers, Slaters, &c.	661	26	31	4	722
Builders	35	—	3	1	39
Butchers, Poulterers, &c.	81	3	20	—	104
Cabinet Makers and Upholsterers	20	2	13	—	35
Carpenters and Joiners	2,341	122	76	14	2,553
Carvers and Gilders	22	2	4	—	28
Clerks	456	98	152	84	790
Clock and Watch Makers	16	—	8	1	25
Coach Makers and Trimmers	10	—	2	—	12
Coal Miners	283	3	3	—	289
Coopers	103	3	8	1	115
Cutlers	31	1	—	—	32
Domestic Servants	305	20	50	37	412
Dyers	27	4	—	—	31
Engine Drivers, Stokers, &c.	22	3	4	1	30
Engineers	290	39	52	63	444
Engravers	17	3	2	—	22
Farmers	4,936	1,766	443	113	7,258
Gentlemen, Professional Men, Merchants, &c.	4,030	1,020	1,364	757	7,171
Jewellers and Siversmiths	24	3	4	—	31
Labourers, General	43,228	4,385	1,493	149	49,255
Locksmiths, Gunsmiths, &c.	2	—	2	2	6
Millers, Maltsters, &c.	39	5	8	—	52
Millwrights	2	2	3	23	30
Miners and Quarrymen	5,965	2,278	245	12	8,500
Painters, Paperhangers, Plumbers, and Glaziers	305	9	17	2	333
Pensioners	1	—	1	—	2
Printers	103	2	5	1	111
Rope Makers	1	1	4	—	6
Saddlers and Harness Makers	15	3	11	1	30
Sail Makers	7	—	1	—	8
Sawyers	9	4	2	—	15
Seamen	165	86	21	6	278
Shipwrights	17	2	2	1	22

Appendix No. 6.—*continued.*

Occupation.	United States.	British North America.	Australasia.	All other Places.	Total.
Adult Males—*continued.*					
Shopkeepers, Shopmen, Warehousemen, &c.	264	35	89	31	419
Smiths, General	664	30	13	5	712
Spinners and Weavers	347	22	11	1	381
Sugar Bakers, Boilers, &c.	50	2	1	—	53
Surveyors	2	—	4	2	8
Tailors	809	106	36	—	951
Tallow Chandlers and Soap Makers	2	—	1	—	3
Tanners and Curriers	30	—	5	6	41
Turners	17	1	4	1	23
Wheelwrights	11	1	10	1	23
Woolcombers and Sorters	8	—	2	—	10
Trades and Professions not before specified	2,392	146	343	128	3,009
Not distinguished	4,762	508	1,001	1,698	7,969
Adult Females.					
Domestic and Farm Servants, Nurses, &c.	6,157	394	1,864	177	8,592
Gentlewomen and Governesses	462	155	173	78	868
Milliners, Dress Makers, Needlewomen	258	6	70	1	335
Married Women	18,578	2,766	1,367	887	23,598
Shopwomen	8	—	5	—	13
Trades and Professions not before specified	53	1	36	1	91
Not distinguished	20,081	1,999	999	438	23,517
Children.					
Male children, 1 to 12 years	12,760	2,061	902	462	16,185
Female do. do.	11,158	1,640	899	439	14,136
Infants, Males	3,538	628	127	60	4,353
Do. Females	3,060	486	147	50	3,743
Not distinguished as to age, Males	3,338	20	7	585	3,950
Do. Do. Females	1,973	13	4	188	2,178
Total	155,532	21,062	12,809	6,922	196,325

Government Emigration Board,
8, *Park Street, Westminster, 4th May* 1869.

S. Walcott.

TABLE showing the Details of the EMIGRATION to the AUSTRALIAN COLONIES, NATAL, and the FALKLAND ISLANDS, conducted by the EMIGRATION COMMISSIONERS, at the Expense of Colonial and Public Funds, during the Year 1868.

Number of Ships.	Tonnage.	Colony.	Description of Emigrants.	Number of Emigrants Embarked.										Native Country of Emigrants.				Remarks.
				Adults.				Children from 1 to 12 years.		Infants.		Total Souls.	Statute Adults.	English.	Scotch.	Irish.	Foreigners.	
				Married.		Single.												
				M.	F.	M.	F.	M.	F.	M.	F.							
1	1,188	New South Wales	Remittance -	19	23	186	216	34	30	4	1	*513	476	98	56	357	2	*77 of these were conveyed in private vessels.
			General -	1	1	1	1	2	1	- -	- -	†7	5½	6	- -	1	- -	†2
			Total -	20	24	187	217	36	31	4	1	520	481½	104	56	358	2	
6	8,667	Victoria - -	Passage Warrant Holders -	198	200	695	940	222	247	22	21	‡2,546	2,268½	972	178	1,390	6	‡294 of these were conveyed in private vessels.
			General -	18	17	3	193	5	4	1	- -	§241	235½	170	8	63	- -	§1
			Total -	217	217	698	1,133	227	251	23	21	2,787	2,504	1,142	186	1,453	6	
2	877	Western Australia	Nominees -	5	5	7	14	2	- -	1	- -	34	32	10	- -	24	- -	
			General - -	8	8	- -	82	3	3	- -	2	106	101	18	- -	88	- -	
			Total -	13	13	7	96	5	3	1	2	140	133	28	- -	112	- -	

(*continued*)

Appendix No. 7.—*continued.*

Table showing the Details of the Emigration to the Australian Colonies, Natal, and the Falkland Islands, &c.—*continued.*

Number of Ships.	Tonnage.	Colony.	Description of Emigrants.	Number of Emigrants Embarked.										Native Country of Emigrants.				Remarks.
				Adults.				Children from 1 to 12 years.		Infants.		Total Souls.	Statute Adults.	English.	Scotch.	Irish.	Foreigners.	
				Married.		Single.												
				M.	F.	M.	F.	M.	F.	M.	F.							
1	336	Natal - -	Nominees -	1	2	6	6	2	4	- -	- -	*21	18	20	1	- -	- -	*16 of these were conveyed in private vessels.
			General -	14	14	64	6	6	6	- -	1	†111	104	36	43	32	- -	†66
			Total -	15	16	70	12	8	10	- -	1	132	122	56	44	32	- -	
—	—	Falkland Islands -	Nominees, Total	1	1	5	3	- -	- -	- -	1	‡11	10	2	9	- -	- -	‡ Conveyed in a private vessel.
			Remittance, Nominees, and Passage Warrant Holders - -	225	231	899	1,179	260	281	27	23	3,125	2,804½	1,102	244	1,771	8	
			General - -	41	40	68	282	16	14	1	3	465	446	230	51	184	- -	
10	11,098		Grand Total - -	266	271	967	1,461	276	295	28	26	3,590	3,250½	1,332	295	1,955	8	

Government Emigration Board,
8, Park Street, Westminster, 4th May 1869.

S. Walcott.

Appendix No. 8.

Table showing the Details of the Emigration conducted by the Emigration Commissioners, at the Expense of Public Funds, during the Years 1862, 1863, and 1864.

Appendix No. 8.

Table showing the Details of the Emigration conducted by the Emigration Commissioners

Note.—*For Details of the Emigration for the* 16 *Years* 18

Date.	No. of Ships.	Tonnage.	Colony.	Emigra								
				Adults.				Children from 1 to 12 Years.		Infants.		Tot Sou
				Married.		Single.						
				M.	F.	M.	F.	M.	F.	M.	F.	
1862	9	8,705	New South Wales -	207	221	1,175	1,011	192	203	29	40	[a]3,(
	6	5,011	Queensland - -	271	271	558	515	132	152	33	20	[b]1,(
	4	4,878	Victoria - -	143	143	26	1,000	75	81	17	12	[c]1,(
	3	2,915	South Australia -	120	124	335	320	58	82	12	15	1(
	2	1,457	Western Australia -	86	88	69	207	48	54	12	8	[d]
	—	—	Tasmania - -	—	2	—	16	—	1	—	—	[e]
	2	1,555	Cape of Good Hope -	57	57	167	127	44	41	3	4	[
	4	1,902	Natal - -	66	71	100	59	53	51	12	10	[
	—	—	Falkland Islands -	2	2	6	—	—	1	1	—	[
Total -	30	26,423		952	979	2,436	3,255	602	666	119	109	9,
	—	—	Victoria - -	1	1	2	—	—	1	—	—	
	—	—	St. Helena - -	—	1	—	—	—	1	—	—	
1863	14	15,312	New South Wales -	397	426	1,811	1,687	376	347	55	48	[f]5,1
	5	3,344	Queensland - -	134	139	525	346	124	127	16	15	1,4
	7	5,893	Victoria - -	362	362	19	1,512	119	130	44	35	[g]2,5
	5	4,181	South Australia -	216	224	506	388	165	149	31	21	1,7
	2	954	Western Australia -	20	22	34	65	9	12	—	3	1
	2	1,679	New Zealand - -	134	134	78	130	65	80	11	11	6
	3	1,199	Natal - - -	31	31	51	42	35	23	7	5	[h]
	—	—	Falkland Islands -	2	2	6	2	2	—	1	—	[e]
Total -	38	32,562		1,296	1,340	3,030	4,172	895	868	165	138	11,9
	—	—	New South Wales -	3	3	—	1	2	5	—	1	
	—	—	Western Australia -	4	4	2	2	4	5	—	—	
	—	—	Natal - - -	4	—	27	—	—	—	—	—	

Appendix No. 8.

Expense of Public Funds, during the Years 1862, 1863, and 1864.

e Commissioners' 24th General Report for 1864, *pp.* 70 *to* 78.

KED.				Deaths on the Voyage.							Infants.		Remarks.
English.	Scotch.	Irish.	Foreigners.	Adults.		Children from 1 to 12 Years.		Infants.		Total.	Born on the Voyage.	Died.	
				M.	F.	M.	F.	M.	F.				
601	179	2,298	–	4	4	3	2	2	4	19	23	1	[a] 6 [b] 44 [c] 5 [d] 42 } of these were conveyed in private vessels.
874	576	502	–	1	1	10	5	4	–	21	34	5	
686	443	368	–	1	3	1	–	–	–	5	9	–	
533	305	228	–	2	2	9	12	4	1	30	8	2	
321	33	218	–	1	1	1	–	–	–	3	8	1	
6	—	13	–	–	–	–	–	–	–	–	–	–	[e] Conveyed in rivate vessels.
207	66	227	–	1	1	–	–	1	–	3	2	–	
329	46	47	–	–	–	–	–	1	1	2	6	1	
3	8	1	–	–	–	–	–	–	–	–	–	–	
3,560	1,656	3,902	–	10	12	24	19	12	6	83	90	10	
5	—	—	–	–	–	–	–	–	–	–	–	–	Artillerymen.
2	—	—	–	–	–	–	–	–	–	–	–	–	Soldier's wife and child.
1,126	423	3,588	10	9	7	2	2	4	2	26	42	6	[f] 10 [g] 356 [h] 28 } of these were conveyed in private vessels.
362	191	873	–	3	1	3	7	1	–	15	16	3	
1,250	536	797	–	4	–	3	8	3	5	23	30	–	
1,206	120	374	–	1	–	1	4	3	–	9	24	2	
88	8	69	–	–	–	1	–	–	–	1	3	–	
556	11	76	–	–	–	4	5	1	1	11	13	3	
153	59	13	–	–	–	–	–	–	–	–	4	–	
—	8	7	–	–	–	–	–	–	–	–	–	–	
4,741	1,356	5,797	10	17	8	14	26	12	8	85	132	14	
15	—	—	–	–	–	–	–	–	–	–	–	–	Artillerymen.
21	—	—	–	–	–	–	–	–	–	–	2	1	Surveyors and soldiers and their families.
31	—	—	–	–	–	–	–	–	–	–	–	–	Policemen.

Appendix No. 8—*continued.*

Table showing the Details of the Emigration conducted by the Emigration Commissio

Date.	No. of Ships.	Tonnage.	Colony.	Emig							
				Adults.				Children from 1 to 12 Years.		Infants.	
				Married.		Single.					
				M.	F.	M.	F.	M.	F.	M.	F.
1864.	10	10,886	New South Wales	259	313	1,288	1,270	249	295	27	38
	7	6,488	Queensland	241	254	778	648	175	127	31	25
	2	2,854	Victoria	43	42	27	646	10	22	8	3
	8	6,244	South Australia	316	334	873	563	215	213	44	42
	2	991	Western Australia	11	16	37	124	10	10	1	2
	—	—	Tasmania	—	2	—	8	2	—	—	—
	—	—	Cape of Good Hope	2	1	11	6	1	2	—	—
	2	796	Natal	19	21	53	45	18	21	4	1
	—	—	Falkland Islands	1	—	—	—	1	—	—	—
Total	31	28,259		892	983	3,067	3,310	681	690	115	111
	—	—	Tasmania	1	1	—	—	1	—	—	—

SUMMARY.

	33	34,903	New South Wales	863	960	4,274	3,968	817	845	111	126
	18	14,843	Queensland	646	664	1,861	1,509	431	406	80	60
	13	13,625	Victoria	548	547	72	3,158	204	233	69	50
	16	13,340	South Australia	652	682	1,714	1,271	438	444	87	78
	6	3,402	Western Australia	117	126	140	396	67	76	13	13
	—	—	Tasmania	—	4	—	24	2	1	—	—
	2	1,679	New Zealand	134	134	78	130	65	80	11	11
	2	1,555	Cape of Good Hope	59	58	178	133	45	43	3	4
	9	3,897	Natal	116	123	204	146	106	95	23	16
	—	—	Falkland Islands	5	4	12	2	3	1	2	—
Total	99	87,244		3,140	3,302	8,533	10,737	2,178	2,224	399	358

Government Emigration Board,
8, *Park Street, Westminster, 4th May* 1869.

Appendix No. 8—*continued.*

ne Expense of Public Funds, during the Years 1862, 1863, and 1864—*continued.*

ARKED.					Deaths on the Voyage.							Infants.		Remarks.
	English.	Scotch.	Irish.	Foreigners.	Adults.		Children from 1 to 12 Years.		Infants.		Total.	Born on the Voyage.	Died.	
					M.	F.	M.	F.	M.	F.				
02	789	220	2,726	4	8	3	6	8	4	3	32	25	1	a 2, b 6, c 194, d 41, f 42 } of these were conveyed in private vessels.
72	542	380	1,357	–	5	9	8	7	5	3	37	22	1	
74	309	209	255	28	–	1	–	–	3	–	4	2	–	
00	1,498	238	864	–	2	2	8	4	7	3	26	22	3	
08	94	9	108	–	–	–	–	–	1	–	1	3	1	
11	3	—	9	–	–	–	–	–	–	–	–	–	–	e Conveyed in private vessels.
21½	11	1	11	–	–	–	–	–	–	–	–	–	–	
57½	102	61	19	–	–	–	–	–	–	–	–	–	–	
1½	—	2	—	–	–	–	–	–	–	–	–	–	–	
37½	3,348	1,120	5,349	32	15	15	22	19	20	9	100	74	6	
2½	3	—	—	–	–	–	–	1	–	–	1	–	–	Artilleryman, wife, and child.

SUMMARY.

396	2,516	822	8,612	14	21	14	11	12	10	9	77	90	8
98½	1,778	1,147	2,732	–	9	11	21	19	10	3	73	72	9
43½	2,245	1,188	1,420	28	5	4	4	8	6	5	32	41	–
60	3,237	663	1,466	–	5	4	13	20	14	4	65	54	7
50½	503	50	395	–	1	1	2	–	1	–	5	14	2
29½	9	—	22	–	–	–	–	–	–	–	–	–	–
48½	556	11	76	–	–	–	4	5	1	1	11	13	3
72	218	67	238	–	1	1	–	–	1	–	3	2	–
89½	584	166	79	–	–	–	–	–	1	1	2	10	1
25	3	18	8	–	–	–	–	–	–	–	–	–	–
913	11,649	4,132	15,048	42	42	35	60	64	44	23	268	296	30

S. Walcott.

Appendix No. 9. - - - .

Table showing the Details of the Emigration conducted by the Emigration Commissioner

Date.	No. of Ships.	Tonnage.	Colony.	Emigrants								
				Adults.				Children from 1 to 12 Years.		Infants.		Total Souls.
				Married.		Single.						
				M.	F.	M.	F.	M.	F.	M.	F.	
1865	5	6,444	New South Wales -	119	131	674	790	133	118	11	15	[a] 1,991
	5	3,766	Queensland - -	102	121	549	499	91	87	13	7	[b] 1,469
	2	2,665	Victoria - -	37	37	—	379	16	6	5	7	[c] 487
	14	11,593	South Australia -	867	883	1,380	614	470	435	92	107	4,848
	2	982	Western Australia -	9	16	13	82	7	8	1	—	136
	—	—	Tasmania - -	—	—	1	7	1	2	—	—	[d] 11
	—	—	Cape of Good Hope -	3	4	5	6	2	1	—	—	[d] 21
	—	—	Natal - -	8	8	14	16	6	8	2	2	[d] 64
	—	—	Falkland Islands -	4	4	17	2	—	5	3	—	[d] 35
Total	28	25,450		1,149	1,204	2,653	2,395	726	670	127	138	9,062
1866	3	2,758	New South Wales -	54	73	387	396	62	43	6	10	1,031
	2	1,432	Queensland - -	31	31	186	252	28	26	1	3	558
	4	7,356	Victoria - -	49	49	8	583	14	26	5	1	735
	8	8,940	South Australia -	372	383	1,155	681	238	194	36	38	3,097
	1	546	Western Australia -	11	11	5	68	9	7	3	—	[e] 114
	—	—	Cape of Good Hope -	—	—	—	2	—	—	—	—	[f]
	—	—	Natal - -	5	12	9	13	15	11	2	1	[f] 68
	—	—	Falkland Islands -	4	3	14	1	2	2	—	1	[f] 27
Total	18	21,032		526	562	1,764	1,996	368	309	53	54	5,633

Appendix No. 9.

Expense of Public Funds, during the Years 1865, 1866, and 1867.

RKED.				Deaths on the Voyage.							Infants.		Remarks.
English.	Scotch.	Irish.	Foreigners.	Adults.		Children from 1 to 12 Years.		Infants.		Total.	Born on the Voyage.	Died.	
				M.	F.	M.	F.	M.	F.				
356	89	1,543	3	3	3	2	4	–	1	13	13	–	[a] 3
303	120	1,046	–	5	7	–	3	1	–	16	14	–	[b] 2 } of these were conveyed in private vessels.
179	58	250	–	–	1	–	–	–	–	1	3	–	[c] 70 }
4,057	640	151	–	4	6	13	10	11	24	68	52	7	
27	5	104	–	1	–	–	–	–	–	1	2	–	
1	—	10	–	–	–	–	–	–	–	–	–	–	[d] Conveyed in private vessels.
4	—	17	–	–	–	–	–	–	–	–	–	–	
57	5	2	–	–	–	–	–	–	–	–	–	–	
6	29	—	–	–	–	–	–	–	–	–	–	–	
4,990	946	3,123	3	13	17	15	17	12	25	99	84	7	
169	62	800	–	1	2	–	–	1	–	4	2	–	
101	37	420	–	1	1	–	–	–	–	2	–	–	
340	51	343	1	–	1	–	–	–	–	1	4	–	
1,332	561	1,204	–	1	2	7	6	8	4	28	36	3	
30	4	80	–	–	–	–	–	–	–	–	–	–	[e] 46 of these were conveyed in a private vessel.
2	—	—	–	–	–	–	–	–	–	–	–	–	
57	11	—	–	–	–	–	–	–	–	–	–	–	[f] Conveyed in private vessels.
7	20	—	–	–	–	–	–	–	–	–	–	–	
2,038	746	2,847	1	3	6	7	6	9	4	35	42	3	

Appendix No. 9.—*continued.*

Table showing the Details of the Emigration conducted by the Emigration Commissioner

Date.	No. of Ships.	Tonnage.	Colony.	Emigran								
				Adults.				Children from 1 to 12 Years.		Infants.		Total Souls
				Married.		Single.						
				M.	F.	M.	F.	M.	F.	M.	F.	
1867.	2	1,955	New South Wales -	31	31	245	277	46	42	7	3	[a] 63
	8	10,940	Victoria - -	280	280	668	1,597	236	244	30	28	[b] 3,3
	1	903	South Australia -	38	38	138	97	19	14	2	3	3
	1	530	Western Australia -	12	12	4	71	3	1	—	3	[a] 1
	—	—	Tasmania - -	—	—	—	7	—	—	—	—	
	—	—	Cape of Good Hope -	—	—	1	1	—	—	—	—	
	—	—	Natal - -	15	15	33	12	11	19	—	3	[c] 1
	—	—	Falkland Islands -	3	4	9	4	—	—	—	—	[c]
Total	12	14,328		379	380	1,098	2,066	315	320	39	40	4,6

SUMMARY.

	10	11,157	New South Wales -	204	235	1,306	1,463	241	203	24	28	3,7
	7	5,198	Queensland - -	133	152	735	751	119	113	14	10	2,0
	14	20,961	Victoria - -	366	366	676	2,559	266	276	40	36	4,5
	23	21,436	South Australia -	1,277	1,304	2,673	1,392	727	643	130	148	8,2
	4	2,058	Western Australia -	32	39	22	221	19	16	4	3	
	—	—	Tasmania - -	—	—	1	14	1	2	—	—	
	—	—	Cape of Good Hope -	3	4	6	9	2	1	—	—	
	—	—	Natal - -	28	35	56	41	32	38	4	6	
	—	—	Falkland Islands -	11	11	40	7	2	7	3	1	
Total	58	60,810		2,054	2,146	5,515	6,457	1,409	1,299	219	232	19,

Government Emigration Board,
8, *Park Street, Westminster, 4th May* 1869.

Appendix No. 9.—*continued.*

Expense of Public Funds, during the Years 1865, 1866, and 1867—*continued.*

KED.				Deaths on the Voyage.							Infants.		Remarks.
English.	Scotch.	Irish.	Foreigners.	Adults. M.	Adults. F.	Children from 1 to 12 Years. M.	Children from 1 to 12 Years. F.	Infants. M.	Infants. F	Total.	Born on the Voyage.	Died.	
76	51	555	–	–	2	—	—	–	–	2	3	–	[a] 2 Of these were conveyed 50 in a private vessel.
1,299	223	1,813	28	1	3	1	4	1	1	11	20	1	[b] 226 of these were conveyed in private vessels.
232	96	21	–	–	–	–	1	–	–	1	2	1	
29	1	76	–	–	–	–	–	–	–	–	1	1	
2	—	5	–	–	–	–	–	–	–	–	–	–	[c] Conveyed in private vessels.
—	—	2	–	–	–	–	–	–	–	–	–	–	
76	10	22	–	–	–	–	–	–	–	–	–	–	
1	19	—	–	–	–	–	–	–	–	–	–	–	
1,715	400	2,494	28	1	5	1	5	1	1	14	26	3	

SUMMARY.

601	202	2,898	3	4	7	2	4	1	1	19	18	–
404	157	1,466	–	6	8	–	3	1	–	18	14	–
1,818	332	2,406	29	1	5	1	4	1	1	13	27	1
5,621	1,297	1,376	—	5	8	20	17	19	28	97	90	11
86	10	260	—	1	—	–	–	–	–	1	3	1
3	—	15	—	—	—	–	–	–	–	–	–	–
6	—	19	—	—	—	–	–	–	–	–	–	–
190	26	24	—	—	—	–	–	–	–	–	–	–
14	68	—	—	—	—	–	–	–	–	–	–	–
8,743	2,092	8,464	32	17	28	23	28	22	30	148	152	13

S. Walcott.

Appendix No. 10.

Summary of Emigration conducted by the Emigration Commissioners, at the Exp

No. of Ships.	Amount of Tonnage.	Colony.	Emigra								
			Adults.				*Children 1 to 14 and 1 to 12 Years.		Infants.		To Sou
			Married.		Single.						
			M.	F.	M.	F.	M.	F.	M.	F.	
I. GOVERNMENT EMIGRANTS.											
324	284,449	New South Wales	14,467	14,605	25,332	28,072	10,439	10,445	1,375	1,394	106
29	24,260	Queensland	962	1,000	2,299	2,681	648	608	117	97	9
341½	302,036	Victoria	17,595	17,595	11,999	39,477	11,392	12,885	1,501	1,628	114
264½	194,837	South Australia	13,238	13,295	15,295	16,669	8,849	8,930	1,246	1,273	78
26	14,036	Western Australia	716	739	715	1,948	489	501	62	72	5
19	11,633	Tasmania	605	615	391	2,037	591	650	47	40	4
2	1,679	New Zealand	163	163	114	164	96	112	13	14	
1,006	832,930		47,746	48,012	56,845	91,048	32,504	34,131	4,361	4,518	319
47	33,059	Cape of Good Hope	1,841	1,841	3,405	2,194	1,318	1,228	231	193	12
19	6,764	Natal	293	316	484	359	299	291	51	44	2
—	—	Falkland Islands	19	18	55	9	8	12	5	1	
1,072	872,753	Total	49,899	50,187	60,789	93,610	34,129	35,662	4,648	4,756	333
II. MISCELLANEOUS PASSENGERS.											
1	1,220	New South Wales	43	43	77	6	29	22	3	4	
—	—	Victoria	1	1	2	—	—	1	—	—	
—	—	Western Australia	4	4	2	2	4	5	—	—	
—	—	Tasmania	1	1	—	—	1	—	—	—	
	1,761	New Zealand	188	188	53	33	148	128	21	20	
—	—	Nova Scotia	5	5	340	—	—	—	—	—	
—	—	British Columbia	—	1	—	2	2	2	—	—	
—	—	St. Helena	—	1	—	—	—	1	—	—	
—	—	Natal	4	—	27	—	—	—	—	—	
18	18,571	East Indies	291	2,883	61	117	1,608	1,551	72	64	6
—	—	Ceylon	3	3	—	1	—	—	—	—	
1	579	Falkland Islands	29	29	6	6	24	22	2	1	
23	22,131	Total	569	3,159	568	167	1,816	1,732	98	89	8
1,095	894,884	Grand Total	50,468	53,346	61,357	93,777	35,945	37,394	4,746	4,845	341

Average per-centage of mortality in vessels to Australas

* Previous to 1856 the Adult age, for the purposes of the Passengers' Act, w

Government Emigration Board,
8, *Park Street, Westminster, 4th May* 1869.

Appendix No. 10.

lic Funds, during the 22 years from 1847 to 1867, both inclusive.

KED.					Deaths on the Voyage.							Infants.		
English.	Scotch.	Irish.	Foreigners.	Not distinguished.	Adults.		Children 1 to 14 and 1 to 12 years.		Infants.		Total.	Born on the Voyage.	Died.	
					M.	F.	M.	F.	M.	F.				
I. GOVERNMENT EMIGRANTS.														
49,975	10,576	45,561	17	–	185	262	361	391	205	200	1,604	1,378	179	
2,715	1,730	4,667	–	–	22	25	30	26	14	7	124	97	9	
52,119	26,786	35,110	57	–	196	408	543	665	248	220	2,280	1,613	211	
50,720	8,893	19,182	–	–	125	173	328	345	190	189	1,350	1,186	159	
2,606	204	2,432	–	–	7	7	10	10	6	4	44	76	10	
1,653	575	2,748	–	–	4	3	13	20	3	10	53	68	9	
659	50	130	–	–	–	–	4	6	1	1	12	13	3	
160,447	48,814	109,830	74	–	539	878	1,289	1,463	667	631	5,467	5,431	580	
6,663	2,080	3,434	74	–	7	9	45	33	29	26	149	111	9	
1,629	342	166	–	–	2	–	1	2	1	1	7	13	2	
26	92	9	–	–	No death.							–	–	
168,765	51,328	113,439	148	–	548	887	1,335	1,498	697	658	5,623	5,555	591	
II. MISCELLANEOUS PASSENGERS.														
227	—	—	–	–	–	–	–	1	–	–	1	5	–	Artillerymen.
5	—	—	–	–	No death.							–	–	Artillerymen.
21	—	—	–	–	No death.							2	1	Surveyors and soldiers and their families.
3	—	—	–	–	–	–	1	–	–	–	1	–	–	Artillerymen.
—	—	—	–	779	1	3	9	1	11	–	25	23	3	Military pensioners.
—	—	—	350	–	No death.							–	–	Soldiers of German Legion.
2	5	—	–	–	No death.							–	–	Family of military engineer.
2	—	—	–	–	No death.							–	–	Soldier's wife and child.
31	—	—	–	–	No death.							–	–	Policemen.
2,232	609	1,042	–	2,764	1	30	260	267	21	21	600	60	12	Wives and families of soldiers in India.
7	—	—	–	–	No death.							–	–	Sappers.
—	—	—	–	119	No death.							3	–	Military pensioners.
2,530	614	1,042	350	3,662	2	33	270	269	32	21	627	93	16	
171,295	51,942	114,481	498	3,662	550	920	1,605	1,767	729	679	6,250	5,648	607	
1847 to 1867					·51	·63	3·96	4·28	15·29	13·96	1·71	–	10·67	

hat date, by the Act of 1855, it was fixed at 12.

S. Walcott.

Appendix No. 11.

NEW SOUTH WALES.

Table showing the Number and Particulars of the Ships and Emigrants despatched by the Emigration Commissioners, at the Expense of Colonial Funds, to New South Wales in 1868, and up to 31 March 1869.

Name of Vessel.	Tonnage.	Contract Price per Statute Adult.	Date of Departure.	Date of Arrival.	No. of Days on the Voyage.	Name of Surgeon Superintendent.	Number of Emigrants.					Number of Deaths on the Voyage.				
							Adults.		Children under 12.		Total Souls.	Adults.		Children under 12.		Total Souls.
							M.	F.	M.	F.		M.	F.	M.	F.	
		£ s. d.	1868.	1868.												
Devonport - -	1,188	14 14 0	2 May	31 July	90	W. Donaldson - -	168	209	35	29	441	2	1	—	1	4
*Glendower - -	1,191	14 0 0	3 Sept.	19 Dec.	107	I. de Lion - -	17	7	5	3	32	No death.				
*Samarang - -	1,175	13 19 0	30 Oct.	1869. 14 Feb.	107	—— Wilke - -	13	22	—	—	35	No death.				
*Queen of the Colonies	1,346	13 19 0	12 Dec.				9	3	—	—	12					
						Total -	207	241	40	32	520	—				-

* Private vessel.

Appendix No. 11.—*continued.*

Analysis of the Mortality in Ships despatched to New South Wales during the 14 years ended 31 December 1868.

Year.	Number and Ages of the Emigrants embarked who Died on the Voyage.												No. of Children who were Born and Died on the Voyage.	
	Numbers embarked.	Total Deaths.	Under 1 year.	1 and under 4.	4 and under 7.	7 and under 10.	10 and under 20.	20 and under 30.	30 and under 40.	40 and under 50.	50 and under 60.	60 and upwards.	Born.	Died.
1855	11,600	132	3	43	7	2	10	26	5	4	—	2	158	8
1856	8,686	121	40	54	6	2	7	7	2	2	1	—	107	4
1857	8,919	95	31	3	5	5	6	9	5	1	3	—	108	13
1858	6,496	90	20	35	4	—	8	14	4	5	—	—	63	9
1859	4,838	78	24	26	4	1	5	7	5	5	—	1	64	8
1860	2,930	26	8	12	1	—	—	2	—	2	—	1	15	1
1861	865	1	—	—	—	—	—	1	—	—	—	—	7	—
1862	3,078	19	6	4	1	—	—	4	2	—	—	2	23	1
1863	4,858	26	6	3	—	—	3	6	4	2	2	—	42	6
1864	3,739	32	7	11	3	—	1	9	—	—	1	—	25	1
1865	1,991	13	1	4	1	1	1	2	2	1	—	—	13	—
1866	1,031	4	1	—	—	—	—	2	1	—	—	—	2	—
1867	682	2	—	—	—	—	—	2	—	—	—	—	3	—
1868	508	4	—	—	—	—	1	3	—	—	—	—	1	—

Government Emigration Board, 8, *Park Street, Westminster*, 4*th May* 1869.

S. Walcott.

Appendix No. 12.

VICTORIA.

Table showing the Number and Particulars of the Ships and Emigrants despatched by the Emigration Commissioners, at the Expense of Colonial Funds, to Victoria in 1867, 1868, and up to 31 March 1869.

Name of Vessel.	Tonnage.	Contract Price per Statute Adult.	Date of Departure.	Date of Arrival.	No. of Days on the Voyage.	Name of Surgeon Superintendent.	Number of Emigrants.					Number of Deaths on the Voyage.				
							Adults.		Children under 12.		Total Souls.	Adults.		Children under 12.		Total Souls.
							M.	F.	M.	F.		M.	F.	M.	F.	
Atalanta - - -	930	£ s. d. 13 8 10	1867. 18 April	1867. 4 July	77	Henry Rickards -	84	256	24	23	387	No death.				
White Star - - -	2,339	13 4 0	25 May	19 Aug.	86	W. Holman - -	92	284	27	21	424	—	3	—	—	3
John Temperley -	975	13 7 5	3 July	22 Sept.	81	A. Goullet, M.D. -	96	235	24	32	387	No death.				
Donald M'Kay - -	2,604	12 19 6	25 Aug.	19 Nov.	86	J. S. Ireland, M.D. -	109	263	40	29	441	—	—	1	—	1
Canterbury - -	1,296	12 10 6	25 Sept.	17 Dec.	83	A. D. White. M.D. -	138	232	35	56	461	—	—	—	2	2
Southern Cross - -	591	13 7 0	19 Oct.	1868. 27 Jan.	100	J. O'Donnell, M.D. -	90	132	23	29	274	No death.				
Southern Ocean -	1,264	12 17 9	3 Dec.	7 Mar.	95	S. L. Crane, M.D. -	107	241	33	35	416	No death.				
Vimeira - - -	941	13 19 0	19 Dec.	2 Apr.	105	A. Newbold, M.D. -	83	195	37	32	347	1	—	1	2	4
							149	39	23	15	*226	—	—	—	1	1
						Total - -	948	1,877	266	272	3,363	1	3	2	5	11

* Conveyed in private vessels.

Appendix No. 12—*continued.*

Table showing the Number and Particulars of the Ships and Emigrants despatched by the Emigration Commissioners, &c.—*continued.*

Name of Vessel.	Tonnage.	Contract Price per Statute Adult.	Date of Departure.	Date of Arrival.	No. of Days on the Voyage.	Name of Surgeon Superintendent.	Number of Emigrants.					Number of Deaths on the Voyage.				
							Adults.		Children under 12.		Total Souls.	Adults.		Children under 12.		Total Souls.
							M.	F.	M.	F.		M.	F.	M.	F.	
		£ s. d.	1868.	1868.												
White Star - -	2,339	13 16 9	8 June	29 Aug.	82	A. Cumming - -	148	224	45	50	467	—	—	1	—	1
Sir Robert Sale - -	704	13 0 0	17 July	4 Oct.	79	H. Costerton - -	52	202	27	28	309	No death.				
Conflict - - -	1,171	13 17 0	26 Aug.	12 Nov.	78	J. G. Winstone - -	113	244	34	40	431	—	1	—	1	2
Tornado - -	1,720	12 8 5	7 Oct.	31 Dec.	85	J. M. Barry, M.D. -	134	192	30	41	397	1	—	2	—	3
Southern Empire -	1,534	12 14 9	30 Oct.	1869. 28 Jan.	90	W. Arthur - -	157	197	45	43	442	2	1	1	1	5
Corona - - -	1,199	12 19 4	23 Nov.	21 Feb.	90	R. Newbold - -	143	240	28	35	446					
							168	51	41	35	*295					
						Total - -	915	1,350	250	272	2,787					
			1869.													
Coldstream - -	756	12 2 0	18 Jan.			W. Donaldson - -	112	126	14	20	272					
Hougoumont - -	962	11 17 6	2 Feb.			W. H. Pearse, M.D. -	124	166	36	25	351					
Gresham - -	965	12 7 0	27 Mar.			J. S. Ireland - -	101	216	31	29	377					
						Total - -	337	508	81	74	1,000					

* Conveyed in private vessels.

APPENDIX No. 12—*continued.*

ANALYSIS of the MORTALITY in Ships despatched to VICTORIA during the 14 years ended 31 December 1868.

Years.	Number and Ages of the Emigrants embarked who Died on the Voyage.											No. of Children who were Born and Died on the Voyage.	
	Numbers embarked.	Total Deaths.	Under 1 Year.	1 and under 4.	4 and under 7.	7 and under 10.	10 and under 20.	20 and under 30.	30 and under 40.	40 and under 50.	50 and under 60.	60 and upwards.	Born.	Died.
1855	6,418	64	11	16	3	4	5	18	3	4	—	—	84	8
1856	7,683	66	24	26	1	1	4	9	—	1	—	—	84	10
1857	12,829	106	24	39	6	5	7	14	6	3	2	—	144	13
1858	5,504	42	7	17	—	3	5	5	3	—	1	1	31	3
1859	2,034	8	3	2	1	—	—	2	—	—	—	—	16	4
1860	1,873	7	—	1	—	—	1	4	1	—	—	—	18	1
1861	1,307	2	—	1	—	—	—	1	—	—	—	—	16	1
1862	1,502	5	1	—	—	—	1	2	—	—	1	—	9	—
1863	2,309	23	8	11	—	—	—	4	—	—	—	—	30	—
1864	801	4	3	—	—	—	—	1	—	—	—	—	5	3
1865	487	1	—	—	—	—	1	—	—	—	—	—	3	—
1866	735	1	—	—	—	—	—	1	—	—	—	—	4	—
1867	2,787	11	2	4	—	—	1	3	—	1	—	—	20	1
1868	2,046	11	4	2	—	—	—	—	1	1	—	2	6	1

Government Emigration Board, 8, Park Street, Westminster, 4th May 1869.

S. WALCOTT.

TABLE showing the Number and Particulars of the SHIPS and EMIGRANTS despatched by the EMIGRATION COMMISSIONERS, at the Expense of Public Funds, to WESTERN AUSTRALIA in 1867, 1868, and up to 31 March 1869.

Name of Vessel.	Tonnage.	Contract Price per Statute Adult.	Date of Departure.	Date of Arrival.	No. of Days on the Voyage.	Name of Surgeon Superintendent.	Number of Emigrants.					Number of Deaths on the Voyage.				
							Adults.		Children under 12.		Total Souls.	Adults.		Children under 12.		Total Souls.
							M.	F.	M.	F.		M.	F.	M.	F.	
		£ s. d.	1867.	1867.												
*Palestine - -	427	15 0 0	13 April	12 Aug.	121	W. T. Young - -	5	36	1	2	44	No death.				
				1868												
Tartar - - -	530	15 0 0	2 Oct.	14 Jan.	104	T. Lovegrove - -	11	47	2	2	62	No death.				
						Total - -	16	83	3	4	106	—	—	—	—	—
			1868.													
Palestine - -	427	15 0 0	25 April	6 Aug.	103	C. Rogers - -	10	52	4	1	67	No death.				
				1869.												
Strathmore - -	450	15 0 0	30 Sept.	6 Jan.	98	E. Thiselton - -	10	57	2	4	73	—	—	1	—	1
						Total - -	20	109	6	5	140	—	—	1	—	1

* Private Vessel.

ANALYSIS of the MORTALITY in Ships despatched to WESTERN AUSTRALIA during the 13 Years ended 31 December 1868.

Year.	Number and Ages of the Emigrants embarked who Died on the Voyage.												No. of Children who were Born and Died on the Voyage.	
	Numbers embarked.	Total Deaths.	Under 1 Year.	1 and under 4.	4 and under 7.	7 and under 10.	10 and under 20.	20 and under 30.	30 and under 40	40 and under 50.	50 and under 60.	60 and upwards.	Born.	Died.
1856	96	—	—	—	—	—	—	—	—	—	—	—	4	—
1857	314	1	—	1	—	—	—	—	—	—	—	—	6	—
1858	198	2	1	—	—	—	—	—	1	—	—	—	3	—
1859	418	2	1	—	—	—	1	—	—	—	—	—	3	—
1860	278	1	—	1	—	—	—	—	—	—	—	—	8	1
1861	68	—	—	—	—	—	—	—	—	—	—	—	1	—
1862	572	3	—	1	—	—	—	2	—	—	—	—	8	1
1863	186	1	—	1	—	—	—	—	—	—	—	—	5	1
1864	211	1	1	—	—	—	—	—	—	—	—	—	3	1
1865	136	1	—	—	—	—	—	1	—	—	—	—	—	—
1866	114	—	—	—	—	—	—	—	—	—	—	—	2	—
1867	106	—	—	—	—	—	—	—	—	—	—	—	1	1
1868	140	1	—	1	—	—	—	—	—	—	—	—	—	—

Government Emigration Board, 8, Park Street, Westminster, 4th May 1869.

S. WALCOTT.

Appendix No. 14.

NATAL.

Table showing the Number and Particulars of the Ships and Emigrants despatched by the Emigration Commissioners, at the Expense of Colonial Funds, to Natal in 1867, 1868, and up to 31 March 1869.

Name of Vessel.	Tonnage.	Contract Price per Statute Adult.	Date of Departure.	Date of Arrival.	No. of Days on the Voyage.	Name of Surgeon Superintendent.	Number of Emigrants.					Number of Deaths on the Voyage.				
							Adults.		Children under 12.		Total Souls.	Adults.		Children under 12.		Total Souls.
							M.	F.	M.	F.		M.	F.	M.	F.	
*Tugela	475	£ s. d. 15 0 0	1867. 24 Jan.	1867. 8 May	104		11	8	7	6	32	No death.				
*Umgeni	366	15 0 0	15 June	14 Aug.	60		19	7	2	3	31	No death.				
*Tugela	475	13 10 0	2 Nov.	1868. 8 Jan.	67		14	8	2	9	33	No death.				
*Earl of South Esk	336	15 0 0	11 Dec.	1 April.	112		4	4	—	4	12	1	—	—	—	1
						Total	48	27	11	22	108	1	—	—	—	1
*Illovo	398	15 0 0	1868. 12 Feb.	23 April.	71	——	15	4	—	2	21	No death.				
*Umgeni	366	15 0 0	28 Mar.	8 June	72	——	3	1	—	—	4	No death.				
*Natal Star	366	15 0 0	20 June	17 Sept.	89	S. H. Loinsworth	20	13	7	7	47	No death.				
Earl of South Esk	336	15 0 0	10 Oct.	17 Dec.	69	H. G. Shea	47	10	1	2	60	No death.				
						Total	85	28	8	11	132	—	—	—	—	—

* Private vessels.

Government Emigration Board,
8, Park Street, Westminster, 4th May 1869.

S. Walcott.

Appendix No. 15.

FALKLAND ISLANDS.

Table showing the Number and Particulars of the Ships and Emigrants despatched by the Emigration Commissioners with Funds derived from the Sale of Lands in the Falkland Islands in 1867, 1868, and up to 31 March 1869.

Name of Vessel.	Tonnage.	Contract Price per Statute Adult.	Date of Departure.	Date of Arrival.	No. of Days on the Voyage.	Name of Surgeon Superintendent.	Number of Emigrants.					Number of Deaths on the Voyage.				
							Adults.		Children under 12.		Total Souls.	Adults.		Children under 12.		Total Souls.
							M.	F.	M.	F.		M.	F.	M.	F.	
		£ s. d.	1867.	1867.												
*Epsilon	548	18 0 0	31 May	12 Aug.	73		4	1	—	—	5	No death.				
*Matilda	220	18 0 0	11 July	23 Sept.	74		6	3	—	—	9	No death.				
*Beta	466	18 0 0	20 July	17 Sept.	69		2	4	—	—	6	No death.				
						Total	12	8	—	—	20	—	—	—	—	—
			1868.	1868.												
*Athole	306	18 0 0	29 Feb.	10 June	102	Total	6	4	—	—	10	No death.				

* Private Vessels.

Government Emigration Board,
8, *Park Street, Westminster, 4th May* 1869.

S. Walcott.

Appendix No. 16.

Summary of the Number of Immigrants introduced into Mauritius in each Year since the Immigration from India was re-opened, distinguishing those arriving under the Bounty System from those introduced under the Plan of collecting and despatching the People from India by Government Officers alone.

Year.	Nature of System.	No. of Ships.	Adults.		Children.	Total.
			Male.	Female.		
1843	Bounty System	157	26,888	3,373	997	31,258
1844	Jan. 1 to March 31, Bounty System	43	7,451	1,157	452	9,060
	April 1 to Dec. 31, Emigration conducted by Government Officers alone	20	4,045	646	401	5,092
	Total 1844	63	11,496	1,803	853	14,152
1845	Emigration conducted by Government Officers alone	44	7,677	1,462	1,146	10,285
1846	Ditto	27	4,847	1,150	792	6,789
1847	Ditto	26	4,845	562	322	5,729
1848	Ditto	21	4,445	564	294	5,303
1849	Ditto	30	5,937	886	459	7,282
1850	Ditto	38	7,793	1,344	686	9,823
1851	Ditto	37	7,743	1,468	560	9,771*
1852	Ditto	61	12,318	2,926	1,552	16,796
1853	Ditto	40	9,131	1,729	1,284	12,144
1854	Ditto	61	13,797	2,527	2,192	18,516
1855	Ditto	43	8,529	2,460	1,926	12,915
1856	Ditto	42	7,953	2,773	1,927	12,653†
1857	Ditto	38	7,314	3,109	2,302	12,725
1858	Ditto	87	18,224	6,898	4,824	29,946
1859	Ditto	120	27,560	9,573	7,264	44,397
1860	Ditto	40	8,026	3,345	1,915	13,286‡
1861	Ditto	44	9,311	2,960	1,714	13,985§
1862	Ditto	33	6,804	1,933	1,156	9,893‖
1863	Ditto	17	3,222	1,179	853	5,254
1864	Ditto	24	5,145	1,528	902	7,575
1865	Ditto	56	13,332	4,085	2,866	20,283
1866	Ditto	16	3,053	1,314	1,229	5,596¶
1867	Ditto	—	—	—	—	— **
1868	Ditto	2	316	159	70	525
	Chinese and others introduced in 1843 and 1845		843			1,178†† 843
	Total	1,167	236,549	61,110	40,085	338,902

* Forty-eight of these came from Madagascar, and five from Muscat.

† Besides these, there were introduced by Private Individuals—

	Adults.		Children.		Infants.	Total Souls.
	Males.	Females.	Males.	Females.		
From Aden	503	89	7	–	33	632
„ Bombay	172	22	4	1	2	201
„ Ibo	314	11	–	–	–	325
Total	989	122	11	1	35	1,158

‡ In addition to these, 730 Africans (638 males and 92 females) were landed direct from a captured slaver.

§ In addition to these, 364 Africans (253 males and 111 females) were landed direct from a captured slaver; 202 captured Africans were also landed in the Seychelles.

‖ In addition to these, 199 Africans were landed in the Seychelles direct from a captured slaver.

¶ In addition to these, 51 Africans were landed direct from a captured slaver.

** 310 men, 22 women, 7 boys, and 11 girls were introduced from Réunion, and 133 Africans were landed in the Seychelles from a captured slaver, and thence transferred to Mauritius.

†† This number is for the last six months of 1868; the return, however, does not distinguish between adults and children, but gives only the following figures:—

Males	1,040
Females	390
Total	1,430

537 men, 56 women, 70 children were also introduced from Réunion, and 17 slaves were received from Madagascar.

Government Emigration Board,
8, Park Street, Westminster, 4th May 1869.

S. Walcott.

Appendix No. 17.

Mauritius.

Statement showing the Number of Emigrants who have embarked for India from the 1st January 1849.

Date.	Males.	Females.	Children.	Total.
1849	4,250	566	76	4,892
1850	3,241	433	50	3,724
1851	2,785	359	39	3,183
1852	2,881	360	72	3,313
1853	1,676	181	171	2,028
1854	3,016	334	325	3,675
1855	3,498	399	370	4,267
1856	3,977	492	428	4,897
1857	3,523	576	494	4,593
1858	6,257	1,034	874	8,165
1859	3,852	681	585	5,118
1860	2,098	378	357	2,833
1861	1,639	323	295	2,257
1862	1,617	316	279	2,212
1863	2,354	485	382	3,221
1864	2,427	507	479	3,413
1865	2,641	550	430	3,621
1866	2,631	599	585	3,815
1867	2,325	563	510	3,398
1868	719	213	170	1,102 1,442*
Total	57,407	9,349	6,971	75,169

* This number is for the last six months of 1868; the return, however, does not distinguish between adults and children, but gives only the following figures:—

Males	1,059
Females	383
Total	1,442

Government Emigration Board,
8, Park Street, Westminster, 4th May 1869.

S. Walcott.

Appendix No. 18.

Return of Immigrants and Liberated Africans introduced into the West India Colonies & Mauritius, from the Year 1843 to the end of the Year 1856, and in each Year since 1st day of January 1857 to the end of the year 1868, so far as known.

Jamaica.

Whence Emigrating.	1843 to 1856.	1857.	1858.	1859.	1860.	1861.	1862.	1863.	1864.	1865.	1866.	1867.	1868.	Tot
Great Britain -	13	—	—	—	—	—	—	—	—	—	—	—	—	
Madeira - -	379	—	—	—	—	—	—	—	—	—	—	—	—	
Sierra Leone -	2,552	—	—	—	—	390	—	—	—	—	—	—	—	2,
St. Helena -	2,632	—	—	—	47	259	608	533	—	—	—	11	—	4,
East Indies -	4,550	—	—	—	598	1,523	1,982	542	—	—	—	1,625	—	10,
China - -	*472	—	—	—	—	—	—	—	—	—	—	—	—	
Canada - -	145	—	—	—	—	—	—	—	—	—	—	—	—	
United States -	23	—	—	—	—	—	—	—	—	—	—	—	—	
British W. Indies	382	—	—	—	—	—	—	—	—	—	—	—	—	
Havannah -	347	—	—	—	—	—	—	—	—	—	—	—	—	
Direct from captured Slavers -	230	362	—	—	—	—	—	—	—	—	—	—	—	
Total -	11,725	362	—	—	645	2,172	2,590	1,075	—	—	—	1,636	—	20,

British Guiana.

Whence Emigrating.	1843 to 1856.	1857.	1858.	1859.	1860.	1861.	1862.	1863.	1864.	1865.	1866.	1867.	1868.	Tot
Great Britain -	21	—	—	—	—	—	—	—	—	—	—	—	—	
Madeira - -	18,569	342	†1,556	‡945	§531	‖ 70	¶ 38	—	—	118	134	304	—	22,
Cape de Verds -	766	—	53	—	—	—	—	—	—	—	—	—	—	
Azores - -	164	—	—	—	—	—	—	—	—	—	—	—	—	
Sierra Leone -	4,619	—	—	—	—	—	—	—	—	—	—	—	—	4,
Kroo Coast -	381	—	—	—	—	—	—	—	—	—	—	—	—	
St. Helena -	2,590	—	281	—	625	40	558	**446	390	42	—	—	—	4,
East Indies -	22,730	2,596	1,405	3,804	5,078	3,729	5,625	2,353	2,710	3,216	2,525	3,910	2,534	62,
China - -	647	—	—	699	1,942	3,365	2,590	396	509	1,691	789	—	—	12,
British W. Indies	1,187	—	56	—	—	—	—	69	4,297	††2,549	§§837	364	—	9,
Surinam - -	31	—	—	—	—	—	—	—	—	—	—	—	—	
Rio de Janeiro -	441	—	—	—	—	—	—	—	—	—	—	—	—	
Martinique - } Guadaloupe - }	367	—	—	—	—	—	—	—	—	—	—	—	—	
Total -	52,513	2,938	3,351	5,448	8,176	7,204	8,811	3,264	7,906	7,616	4,285	4,578	2,534	118,

Trinidad.

Whence Emigrating.	1843 to 1856.	1857.	1858.	1859.	1860.	1861.	1862.	1863.	1864.	1865.	1866.	1867.	1868.	Tot
Madeira - -	725	—	—	—	—	—	—	—	—	—	—	—	—	
Cape de Verds -	—	172	—	—	—	—	—	—	—	—	—	—	—	
Sierra Leone -	2,474	—	—	—	226	—	—	—	—	—	—	—	—	2,
St. Helena -	2,292	—	30	4	470	—	—	—	—	—	—	—	—	2,
East Indies -	10,569	1,414	2,083	3,363	2,169	2,544	1,603	1,801	949	2,759	473	3,267	1,367	34,
China - -	988	—	—	—	—	—	467	—	—	593	597	—	—	2,
United States -	47	—	—	—	—	—	—	—	—	—	—	—	—	
British W. Indies	4,773	—	—	—	—	—	—	—	—	—	1,332	—	—	6,
Rio de Janeiro -	879	—	—	—	—	—	—	—	—	—	—	—	—	
Total -	22,747	1,586	2,113	3,367	2,865	2,544	2,070	1,801	949	3,352	2,402	3,267	1,367	50,

* This includes 205 Chinese brought from Panama.

† 72
‡ 261
§ 396
‖ 35
¶ 9
** 74
†† 63
§§ 80
} of these were not introduced at the public expense.

Appendix No. 18—*continued.*

St. Lucia.

Whence migrating.	1843 to 1856.	1857.	1858.	1859.	1860.	1861.	1862.	1863.	1864.	1865.	1866.	1867.	1868.	Total.
Leone -	551	—	—	—	—	—	—	—	—	—	—	—	—	551
elena -	568	—	—	—	—	—	179	—	—	—	—	—	—	747
Indies -	—	—	—	555	660	—	320	—	—	—	—	—	—	1,535
Total -	1,119	—	—	555	660	—	499	—	—	—	—	—	—	2,833

St. Vincent.

Whence migrating.	1843 to 1856.	1857.	1858.	1859.	1860.	1861.	1862.	1863.	1864.	1865.	1866.	1867.	1868.	Total.
ira - -	546	—	—	—	—	—	—	—	—	—	—	—	—	546
Leone -	234	—	—	—	—	—	—	—	—	—	—	—	—	234
elena -	575	—	—	—	94	119	14	—	—	—	—	—	—	802
Indies -	—	—	—	—	—	260	307	—	—	—	214	477	—	1,258
Total -	1,355	—	—	—	94	379	321	—	—	—	214	477	—	2,840

Grenada.

Whence migrating.	1843 to 1856.	1857.	1858.	1859.	1860.	1861.	1862.	1863.	1864.	1865.	1866.	1867.	1868.	Total.
ira - -	431	—	—	—	—	—	—	—	—	—	—	—	—	431
Leone -	972	—	—	—	—	—	—	—	—	—	—	—	—	972
elena -	85	—	—	—	92	122	57	114	—	—	—	—	—	470
Indies -	—	283	362	299	—	—	1,097	—	—	—	260	—	—	2,301
- -	23	—	—	—	—	—	—	—	—	—	—	—	—	23
Total -	1,511	283	362	299	92	122	1,154	114	—	—	260	—	—	4,197

Antigua.

Whence migrating.	1843 to 1856.	1857.	1858.	1859.	1860.	1861.	1862.	1863.	1864.	1865.	1866.	1867.	1868.	Total.
ira - -	1,973	—	44	—	—	11	—	191	—	—	—	—	—	2,219
de Verds -	195	12	—	—	—	—	—	—	—	—	—	—	—	207
- -	—	—	—	—	—	—	—	*100	—	—	—	—	—	100
h W. Indies	19	—	12	26	—	—	—	1,005	—	—	—	—	—	1,062
Total -	2,187	12	56	26	—	11	—	1,296	—	—	—	—	—	3,588

* Received from a French vessel stranded at Barbuda.

Appendix No. 18—*continued.*

Whence Emigrating.	St. Kitt's.													
	1843 to 1856.	1857.	1858.	1859.	1860.	1861.	1862.	1863.	1864.	1865.	1866.	1867.	1868.	To
Great Britain -	—	—	1	—	—	—	—	—	—	—	—	—	—	
Madeira - -	106	157	253	103	77	43	50	219	—	—	15	51	—	1,
Sierra Leone -	95	—	—	—	—	—	—	223	—	—	—	—	—	
St. Helena -	137	—	—	—	—	—	—	—	—	—	—	—	—	
East Indies -	—	—	—	—	—	337	—	—	—	—	—	—	—	
British W. Indies	5	—	—	—	—	—	—	—	—	—	—	—	—	
Total -	343	157	254	103	77	380	50	442	—	—	15	51	—	1,

Whence Emigrating.	Nevis.													
	1843 to 1856.	1857.	1858.	1859.	1860.	1861.	1862.	1863.	1864.	1865.	1866.	1867.	1868.	T
Madeira - -	427	—	—	—	—	—	—	—	—	—	—	—	—	
Total -	427	—	—	—	—	—	—	—	—	—	—	—	—	

Whence Emigrating.	Tobago.													
	1843 to 1856.	1857.	1858.	1859.	1860.	1861.	1862.	1863.	1864.	1865.	1866.	1867.	1868.	T
Sierra Leone -	46	—	—	—	—	—	—	—	—	—	—	—	—	
St. Helena -	246	—	—	—	—	—	225	—	—	—	—	—	—	
Total -	292	—	—	—	—	—	225	—	—	—	—	—	—	

Whence Emigrating.	Bahamas.													
	1843 to 1856.	1857.	1858.	1859.	1860.	1861.	1862.	1863.	1864.	1865.	1866.	1867.	1868.	T
From wrecked Slaver.	—	—	—	—	389	—	—	—	—	—	—	—	—	
Total -	—	—	—	—	389	—	—	—	—	—	—	—	—	

Whence Emigrating.	Honduras.													
	1843 to 1856.	1857.	1858.	1859.	1860.	1861.	1862.	1863.	1864.	1865.	1866.	1867.	1868.	T
China - - -	—	—	—	—	—	—	—	—	—	474	—	—	—	
United States -	—	—	—	—	—	—	—	—	—	—	—	178	319	
British W. Indies	—	—	—	—	—	—	—	—	—	129	—	—	—	
Total -	—	—	—	—	—	—	—	—	—	603	—	178	319	

Appendix No. 18—*continued.*

Whence migrating.	Total to West Indies.													
	1843 to 1856.	1857.	1858.	1859.	1860.	1861.	1862.	1863.	1864.	1865.	1866.	1867.	1868.	Total.
t Britain -	34	—	1	—	—	—	—	—	—	—	—	—	—	35
eira -	23,156	499	1,853	1,048	608	124	88	410	—	118	149	355	—	28,408
de Verds -	961	184	53	—	—	—	—	—	—	—	—	—	—	1,198
es -	164	—	—	—	—	—	—	—	—	—	—	—	—	164
a Leone -	11,543	—	—	—	226	390	—	223	—	—	—	—	—	12,382
Coast -	381	—	—	—	—	—	—	—	—	—	—	—	—	381
lelena -	9,125	—	311	4	1,328	540	1,641	1,093	390	42	—	11	—	14,485
Indies -	37,849	4,293	3,850	8,021	8,505	8,393	10,934	4,696	3,659	5,975	3,472	9,279	3,901	112,827
a - -	2,107	—	—	699	1,942	3,365	3,057	496	509	2,758	1,386	—	—	16,319
da - -	145	—	—	—	—	—	—	—	—	—	—	—	—	145
ed States -	70	—	—	—	—	—	—	—	—	—	—	178	319	567
sh W. Indies	6,366	—	68	26	—	—	—	1,074	4,297	2,678	2,169	364	—	17,042
nnah -	347	—	—	—	—	—	—	—	—	—	—	—	—	347
- -	23	—	—	—	—	—	—	—	—	—	—	—	—	23
nam - -	31	—	—	—	—	—	—	—	—	—	—	—	—	31
le Janeiro -	1,320	—	—	—	—	—	—	—	—	—	—	—	—	1,320
inique - }	367	—	—	—	—	—	—	—	—	—	—	—	—	367
daloupe - }														
pt from captured and cked Slavers.	230	362	—	—	389	—	—	—	—	—	—	—	—	981
Total -	94,219	5,338	6,136	9,798	12,998	12,812	15,720	7,992	8,855	11,571	7,176	10,187	4,220	207,022

Whence migrating.	Mauritius.													
	1843 to 1856.	1857.	1858.	1859.	1860.	1861.	1862.	1863.	1864.	1865.	1866.	1867.	1868.	Total.
East Coast of rica.	325	—	—	—	—	—	—	—	—	—	—	—	—	325
agascar -	39	—	—	—	—	—	—	—	—	—	—	—	17	56
ion - -	—	—	—	—	—	—	—	—	—	—	—	350	653	1,003
- -	632	—	—	—	—	—	—	—	—	—	—	—	—	632
Indies -	173,141	12,725	29,946	44,397	13,286	13,985	9,893	5,254	7,575	20,278	5,596	—	1,955	338,031
a - -	843	—	—	—	—	—	—	—	—	—	—	—	—	843
ct from captured Slaver.	—	—	—	—	730	*568	†199	—	—	124	51	133	—	1,805
Total -	174,980	12,725	29,946	44,397	14,016	14,553	10,092	5,254	7,575	20,402	5,647	483	2,625	342,695

* 202 of these were landed in the Seychelles.
† Landed in the Seychelles.

Government Emigration Board,
ark Street, Westminster, 4th May 1869.

S. Walcott.

Appendix No. 19.

Return showing the Number of Immigrants and Liberated Africans who have Returned to their own Countries from the British West India Colonies and Mauritius, and (as far as can be ascertained) the Amount of Earnings remitted through Government Agency in their behalf, from 1843 to 1868.

Year.	From Jamaica.		From British Guiana.		From Trinidad.		From St. Lucia.		From Grenada.		From Mauritius.	
	No.	Amount of Earnings.	No.	Amount of Earnings.	No.	Amount of Earnings.	No.	Amount of Earnings.	No.	Amount of Earnings.	No.	Amount of Earnings.
		£ s. d.		£ s. d.		£ s. d.		£ s. d.		£ s. d.		
1843 to 1856 -	1,644	*3,000 0 0	†3,283	‡25,474 19 2	1,675	23,561 10 10	—	- - -	—	- - -	46,066	No Returns.
1857 - -	—	- - -	595	10,963 1 3	343	6,392 19 7	—	- - -	—	- - -	4,593	
1858 - -	126	No Return -	323	5,705 10 11	359	5,829 18 11	—	- - -	—	- - -	8,165	
1859 - -	—	- - -	797	15,018 12 8	—	- - -	—	- - -	—	- - -	5,118	
1860 - -	—	- - -	—	- - -	—	- - -	—	- - -	—	- - -	2,833	
1861 - -	74	No Return -	—	- - -	303	4,076 13 8	—	- - -	—	- - -	3,257	
1862 - -	—	- - -	407 7	§8,983 15 0 ‖403 6 8	—	- - -	—	- - -	—	- - -	2,212	
1863 - -	—	- - -	—	- - -	—	- - -	—	- - -	—	- - -	3,221	
1864 - -	—	- - -	467	¶13,939 7 9	—	- - -	—	- - -	—	- - -	3,413	
1865 - -	—	- - -	462	**11,485 4 2	514	††14,000 0 0	—	- - -	—	- - -	3,621	
1866 - -	—	- - -	—	- - -	—	- - -	—	- - -	—	- - -	3,815	
1867 - -	4	- - -	451	‡‡11,500 0 0	—	- - -	—	- - -	—	- - -	3,398	
1868 - -	—	- - -	—	- - -	—	- - -	298	§§2,397 18 8	76	‖‖1,277 4 0	2,544	
Total -	1,848	3,000 0 0	6,792	103,473 17 7	3,194	53,861 3 0	298	2,397 18 8	76	1,277 4 0	92,256	

* This is for two ships only, carrying 588 passengers. No returns for the other vessels.

† In regard to 1,308 passengers of this number there are no returns of money deposited with the Government authorities, or of the sums they had in their possession on embarkation for their own countries.

‡ In this amount are included the sums, so far as known, deposited by the passengers with the captains of the vessels in which they embarked.

§ In addition to this amount, which was deposited with the Government Immigration Agent, that officer estimates that the savings of these coolies could not be less than 15,000*l.*, including the value of the jewels and money which they took back with them, and the cost of the passages and clothing (1,445*l.* 8*s.* 4*d.*) of such of them as were not entitled to free return passages.

‖ Besides this amount, these people paid for their own passages back to India via England.

¶ In this amount is included 1,000*l.*, the estimated value of the jewels on the immigrants, and a Bill of Exchange for 494*l.* 15*s.* 10*d.*, which one of the coolies took with him.

** This includes 250*l.*, the estimated value of the jewels on the immigrants.

†† This amount consisted of—

	£	s.	d.
Money deposited in Colonial Chest - - -	9,700	0	0
Specie in possession of immigrants - - -	2,701	3	7
Estimated value of jewels and undeclared specie	2,598	16	5
£	14,000	0	0

In addition to this sum 77 people paid their own passages at the rate of 11*l.* 19*s.* 9*d.* per adult, amounting to 91*l.* 1*s.*

‡‡ This sum consisted of—

	£	s.	d.
Money deposited with Colonial Receiver General -	10,237	14	2
Money transmitted through banks, specie in possession of Immigrants, and value of jewels; estimated at -	1,262	5	10
£	11,500	0	0

§§ Besides this amount these people deposited 313*l.* 6*s.* 8*d.* for clothing.

‖‖ This amount consisted of—

	£	s.	d.
Money deposited for transmission to India - -	804	14	0
Specie in possession of immigrants - - -	424	0	0
Estimated value of jewelry - - - -	48	10	0
£	1,277	4	0

In addition to this sum these people deposited 82*l.* 14*s.* 6*d.* for clothing, and 10 of the coolies paid 87*l.* 10*s.* towards the cost of their return passages.

Government Emigration Board.

S. Walcott.

Appendix No. 20.

Table showing the Number and Particulars of the Ships despatched from Calcutta to the West Indies during the Season 1867–68.

Name of Ship.	Tonnage.	Contract Price.	Date of Departure.	Date of Arrival.	Number of Days on the Voyage.	Name of Surgeon.	Numbers Embarked.							Births on the Voyage.	Deaths		Number landed.
							Adults.		Children.		Infants.		Total.		On the Voyage.	In Harbour.	
							M.	F.	M.	F.	M.	F.					
British Guiana.		£ s. d.	1867.	1867.													
Oasis - -	1,116	15 0 0	8 Aug.	9 Dec.	123	W. Campbell, M.D. -	241	92	23	12	4	3	375	3	19	—	359
				1868.													
Orient - -	974	14 10 0	25 Aug.	18 Feb.	*177	R. Rivers - - -	267	80	15	11	3	8	384	5	17	—	372
				1867.													
Trevelyan - -	1,042	14 10 0	13 Sept.	20 Dec.	98	H. C. Stewart - -	259	110	9	5	5	—	388	3	8	—	383
				1868.													
Jason - -	1,022	13 19 6	22 Oct.	14 Jan.	84	H. Rickards - - -	291	92	11	4	5	2	405	4	16	—	393
			1868.														
Ganges - -	839	12 0 0	21 Jan.	8 April	78	J. S. Hughes, M.D. -	307	88	7	3	4	1	410	1	11	—	400
Clarence - -	1,104	12 10 0	15 Feb.	8 June	114	C. Turner - - -	369	73	10	7	2	3	464	—	21	1	442
Adamant - -	815	13 10 0	6 Mar.	25 June	111	W. F. P. Pollard - -	269	66	16	7	2	3	363	3	12	—	354
Harkaway -	899	13 10 0	15 Mar.	20 June	97	J. T. S. Jolley - -	164	35	2	6	2	3	212	1	4	—	209
						Total - -	2,167	636	93	55	27	23	3,001	20	108	1	2,912
Trinidad.			1867.	1867.													
Liverpool - -	1,454	14 0 0	8 Sept.	22 Dec.	105	W. H. Pearse, M.D. -	329	159	22	13	4	5	532	4	21	—	515
Ellenborough -	1,031	13 0 0	1 Oct.	27 Dec.	87	W. C. Kiernander -	195	136	14	9	4	2	360	3	14	—	349
				1868.													
Sevilla - -	598	12 10 0	7 Dec.	7 Mar.	91	W. Holman - -	190	89	4	8	1	4	296	4	4	—	296
			1868.														
Ancilla - -	715	12 10 0	29 Jan.	2 May	94	J. Carroll - - -	243	68	8	3	2	3	327	3	2	—	328
Albert Victor -	1,184	13 10 0	16 Mar.	24 June	100	C. Chapman - -	240	65	10	5	2	3	325	2	12	1	314
						Total - -	1,197	517	58	38	13	17	1,840	16	53	1	1,802
						Grand Total -	3,364	1,153	151	93	40	40	4,841	36	161	2	4,714

* This Vessel put into Mauritius to repair a leak on the 8th November; sailed again on the 20th December.

Government Emigration Board,
8, *Park Street, Westminster,* 4*th May* 1869.

S. Walcott.

Appendix No. 21.

Table showing the Number and Particulars of the Ships despatched from Calcutta to the West Indies during the Season 1868-69, so far as at present known.

Name of Ship.	Tonnage.	Contract Price.	Date of Departure.	Date of Arrival.	Number of Days on the Voyage.	Name of Surgeon.	Numbers Embarked.							Births on the Voyage.	Deaths		Number landed.
							Adults.		Children.		Infants.		Total.		On the Voyage.	In Harbour.	
							M.	F.	M.	F.	M.	F.					
Jamaica.		£ s. d.	1868.	1868.													
Patrician - -	1,139	12 2 6	17 Dec.	28 Mar.	101	H. C. Stewart -	286	117	22	14	11	14	464	3	15	—	451*
			1869.														
Buckinghamshire	1,465	12 2 6	17 Jan.			P. Hughes - -	347	136	30	18	17	10	558				
Gainsborough -		12 2 6	2 Feb.			Kunsden - -	240	95	26	24	7	12	404				
						Total -	873	348	78	56	35	36	1,426				
British Guiana.			1868.	1868													
India - - -	912	12 10 0	25 Aug.	20 Nov.	87	W. R. Macauley -	249	85	19	6	6	7	372	3	11	—	364
				1869.													
Howrah - -	1,097	12 10 0	15 Sept.	8 Jan.	115	J. O'Donnell -	298	97	18	14	13	3	443	6	28	—	421
Trevelyan - -	1,042	12 10 0	26 Sept.	25 Jan.	121	S. P. Chennell -	271	90	16	15	9	6	407	7	36	2	376
Winchester -	1,157	12 10 0	17 Oct.	14 Jan.	89	C. Chapman -	297	103	27	8	8	10	453	3	18	—	438
Himalaya - -	1,007	13 10 0	10 Nov.	31 Jan.	84	C. H. Graham, M.D.	258	106	31	7	15	10	427	2	18	2	409
Jason - -	1,020	12 10 0	2 Dec.			T. Allard - -	266	104	25	16	10	6	427				
			1869.														
Ganges - -	839	12 10 0	2 Jan.			W. F. P. Pollard -	248	90	25	12	6	10	391				
Syria - -	1,050	12 10 0	21 Jan.			M. C. Davey -	281	105	26	13	8	15	448				
Walmer Castle -		11 10 0	10 Feb.			James N. Earle -											
Salamanca -	861	12 10 0	23 Feb.			R. P. Hudson -	212	91	31	19	13	13	379				
Sir Robert Sale -	741	12 0 0	27 Feb.			J. Kelly - -	180	71	34	17	12	8	322				
Michael Angelo -	1,174	12 10 0	14 Mar.			W. Arthur - -	310	93	36	23	13	16	491				
						Total -	2,870	1,035	288	150	113	104	4,560				

Appendix No. 21.—*continued.*

Name of Ship.	Tonnage.	Contract Price.	Date of Departure.	Date of Arrival.	Number of Days on the Voyage.	Name of Surgeon.	Numbers Embarked.							Births on the Voyage.	Deaths		Number landed.
							Adults.		Children.		Infants.		Total.		On the Voyage.	In Harbour.	
							M.	F.	M.	F.	M.	F.					
TRINIDAD.		£ s. d.	1868.	1868.													
Malabar - -	1,219	11 7 6	21 Sept.	27 Dec.	97	J. Carroll - -	330	82	12	4	4	3	435	4	10	—	429
Poonah - -	1,199	13 10 0	25 Nov.	1869. 21 Feb.	89	J. S. Hughes, M.D.	217	116	22	12	13	7	387	5	5	—	387
Arima - -	692	13 10 0	30 Dec.	30 Mar.	90	W. Holman - -	200	67	19	15	8	4	313	—	9	—	304
Sevilla - -	598	13 10 0	1869. 9 Jan.			M. A. Raheem, M.D.	163	80	26	25	9	10	313				
Ancilla - -	714	13 10 0	30 Jan.			Moti Lal Mitra -	169	80	34	24	10	7	324				
						Total - -	1,079	425	113	80	44	31	1,772				
ST. VINCENT.																	
Imperatrice Eugenie - -	745	12 10 0	13 Mar.			J. Lee - -	204	85	30	18	7	5	349				
						Total - -	204	85	30	18	7	5	349				
						Grand Total -	5,026	1,893	509	304	199	176	8,107				

* One woman missing on arrival.

Government Emigration Board,
8, *Park Street, Westminster, 4th May* 1869.

S. Walcott.

Appendix No. 22.

Return of Ships and Coolies (entitled to back Passages) despatched from the West to the East Indies, from 1850.

Colony and Ship.	Date of Sailing.	Numbers Embarked.						Deaths during the Voyage.	Number landed.
		Adults.		Children.		Infants.	Total.		
		M.	F.	M.	F.				
Jamaica:									
* Ostrich	1853. Apr. 1	128	36	11	10	13	198	5	193
*†Harkaway	Apr. 10	264	73	20	14	19	390	2	388
†Edward	Apr. 10	192	83	16	8	5	304	15	289
*†William Jardine	Apr. 15	228	26	6	10	5	275	18	257
*†Gloriana	1854. Jan. 21	280	68	23	24	34	429	13	416
* Sir George Pollock	1858. Apr. 13	55	26	24	16	5	126	1	127
Total		1,147	312	100	82	81	1,722	54	1,670
British Guiana:									
* Lucknow	1850. Nov. 19	188	35	9	12	3	247	10	237
*†Zenobia	1851. June 26	213	54	25	13	–	305	22	283
†Lord Elgin	Oct. 6	96	33	6	11	–	146	3	143
†Hempsyke	Nov. 1	118	27	11	9	–	165	11	154
* Glentanner	Nov. 15	241	37	23	10	–	311	83	228
*†Lucknow	1852. Mar. 9	198	41	36	15	–	290	8	282
* Thetis	Oct. 18	192	24	3	–	10	229	13	216
†Sandford	1853. Aug. 9	143	44	15	6	3	211	15	196
* Sandford	1854. Nov. 16	213	24	5	3	6	251	8	243
† Empress Eugenie	1856. Oct. 17	156	67	15	13	9	260	8	259
* Blue Jacket	1857. Mar. 24	213	52	22	17	14	318	5	318
* Hamilla Mitchell	Sept. 24	209	40	10	10	8	277	8	269
* White Eagle	1858. May 13	256	42	8	10	7	323	8	316
* Queen of the East	1859. Oct. 2	290	59	16	13	12	390	15	376
† Henry Moore	Nov. 22	224	110	24	24	25	407	83	330
* Gipsy Bride‡	1862. Sept. 24	270	80	24	25	8	407	28	381
* Ganges	1864. Sept. 2	280	91	34	30	12	447	9	438
* Clarence (a.)	1865. Sept. 3	289	93	30	33	17	462	34	433
* Ganges (b.)	1867. Sept. 18	263	103	36	33	16	451	8	445
Total		4,052	1,056	352	287	150	5,897	379	5,547
Trinidad:									
* Eliza Stewart	1851. May 31	17	2	1	2	–	22	Nil.	22
* Eliza	Sept. 6	271	49	16	18	–	354	30	324
*†Clarendon	1852. Mar. 12	182	41	12	6	–	241	16	225
* Bucephalus	1853. Aug. 3	288	19	–	4	3	314	12	302
*†Shand	Aug. 19	222	33	10	11	11	287	4	283
*†Scindian§	1855. June 1	108	29	19	18	3	177	13	164
*†Arabia	1856. Oct. 18	177	48	26	24	5	280	9	288
*†Eveline	1857. Oct. 17	266	33	18	22	4	343	9	339
* Morayshire‖	1858. Dec. 10	243	54	32	23	7	359	14	346
* Brechin Castle	1861. Oct. 23	236	34	10	17	6	303	19	285
* British Trident	1865. Dec. 21	354	87	35	32	6	514	31	492
Total		2,364	429	179	177	45	3,194	157	3,070
St. Lucia:									
* Lincelles	1868. Nov. 11	180	56	23	12	27	298		
St. Vincent:									
* Lincelles	1868. Nov. 21	40	19	6	6	5	76		

The difference between the number of coolies reported to have been embarked in the West Indies, and the number reported to have been landed at Calcutta, is in some cases materially less than the reported number of deaths. This arises partly from births on the voyage, and partly perhaps from the embarkation at the last moment of persons not entered in the lists. It is thought best, however, to give the number as they have been reported to the Board, without attempting to reconcile the discrepancy.

Vessels marked thus * sailed for Calcutta; thus † for Madras; thus *† for both Calcutta and Madras.

‡ In this vessel twelve Maldivians were also embarked.
§ In this vessel two Chinese were also embarked.
‖ In this vessel three Chinese were also embarked.
(a) In this vessel one Chinese and six Indians were also embarked.
(b.) In this vessel four Coolies from Jamaica and one Madrassee were also embarked.

Government Emigration Board,
8, *Park Street, Westminster, 4th May* 1869.

S. Walcott.

Appendix No. 23.

Return showing Amounts of Money remitted by Settlers in North America to their Friends in the United Kingdom from 1848 (the first Year in which we have any Information) to 1868, both inclusive.

Year.	Amount.
	£
1848	460,000
1849	540,000
1850	957,000
1851	990,000
1852	1,404,000
1853	1,439,000
1854	1,730,000
1855	873,000
1856	951,000
1857	593,165
1858	472,610
1859	520,019
1860	534,476
1861	374,061
1862	360,578
1863	*383,286
1864	332,172
1865	481,580
1866	498,028
1867	543,029
1868	530,564

* In addition to this amount 44,123*l.* were remitted from America and Australia, but the sum from each place cannot be specified.

Note.—The above return for the years 1859 to 1865 does not correspond with the similar returns printed in former Reports, the amounts remitted from Australia being here omitted, and some errors which have been discovered in former returns corrected. The return must be taken only as an approximation to the sums actually sent home, the Commissioners having to depend altogether on the courtesy of the banks and mercantile houses connected with America for the information it contains, and having no means of ascertaining the amounts sent home through private hands or through banks or mercantile houses which decline to furnish them with information.

S. Walcott.

Government Emigration Board,
8, *Park Street, Westminster, 4th May* 1869.

Appendix No. 24.

Table showing the Mortality in Sailing Ships that cleared from Liverpool for the United States during the year 1868 (so far as Reports have been received).

Date of Clearance.	Name of Ship.	Ships reported.		
		Nos. embarked.	Deaths.	
1868.				
April 11	Victory - -	646	—	
22	Columbia - -	469	1	
30	Star of the West -	273	—	
May 6	Isaac Webb - -	359	—	
12	Alexander Marshall -	267	—	
20	Edith - - -	244	—	
21	W. F. Storer - -	437	—	
June 3	Harvest Queen -	427	—	
6	Wm. Tapscott -	247	—	
20	Great Western -	434	—	
20	Emerald Isle - -	871	37	
Aug. 6	James Forster, Jun. -	415	2	
Sept. 21	Isaac Webb - -	352	5	
Oct. 15	Harvest Queen -	333	—	
23	W. F. Storer - -	104	—	
Nov. 16	Great Western - -	101	—	
Dec. 15	James Forster, Jun. -	144	—	
	Total - -	6,123	45	= ·73 per Cent.
	For Philadelphia.			
July 18	Tuscarora - -	226	—	
Aug. 19	Tonawanda - -	223	—	
	Total - -	449	—	

Government Emigration Board,
8, *Park Street, Westminster, 4th May* 1869.

S. Walcott.

Appendix No. 25.

Table showing the Mortality in Steam Ships that cleared from Liverpool for the United States and Canada during the Year 1868 (so far as Reports have been received).

Date of Clearance.	Name of Ships.	Ships reported.			
		Nos. embarked at Liverpool.	Nos. embarked at Cork.	Total.	Deaths.
1868.	For New York.				
Jan. 1	City of Baltimore	285	55	340	1
4	Etna	93	—	93	—
7	Aleppo	161	34	195	—
8	France	208	60	268	1
8	City of Boston	238	92	330	—
14	Colorado	172	16	188	—
15	City of Antwerp	238	84	322	1
18	City of New York	146	23	169	—
21	Tarifa	167	59	226	—
22	City of London	251	62	313	—
29	City of Paris	368	150	518	—
29	Denmark	149	107	256	—
Feb. 1	City of Washington	103	—	103	—
4	Tripoli	121	79	200	—
5	City of Baltimore	206	47	253	—
5	Manhattan	181	88	269	—
12	City of Boston	443	94	537	—
12	Pennsylvania	184	103	287	—
15	Etna	188	70	258	—
18	Aleppo	162	116	278	—
19	City of Antwerp	410	184	594	1
21	France	254	119	373	—
25	Colorado	409	74	483	—
26	City of New York	331	203	534	—
26	Louisiana	185	172	357	—
29	City of Cork	241	85	326	4
Mar. 3	Nebraska	407	36	443	—
3	Tarifa	175	92	267	—
4	City of London	345	109	454	—
4	Erin	267	78	345	—
11	Denmark	364	137	501	—
11	City of Baltimore	554	105	659	—
14	City of Washington	231	207	438	1
17	Palmyra	240	132	372	—
18	City of Boston	546	195	741	—
20	Helvetia	232	151	383	—
24	Manhattan	654	278	932	—
25	City of Antwerp	593	286	879	—
26	Pennsylvania	311	311	622	—
28	Etna	381	3	384	—
31	Tripoli	328	211	539	—
	Carried forward	11,522	4,507	16,029	9

Date of Clearance.	Name of Ships.	Ships reported. Nos. embarked at Liverpool.	Nos. embarked at Cork.	Total.	Deaths.
1868.	Brought forward -	11,522	4,507	16,029	9
April 1	City of Paris -	670	252	922	—
1	France - -	573	214	787	—
7	Aleppo - -	403	151	554	—
7	Minnesota - -	776	326	1,102	—
8	City of London -	809	285	1,094	1
8	Virginia - - -	620	347	967	—
11	City of Cork - -	419	—	419	1
14	Siberia - -	439	245	684	1
15	City of Baltimore -	915	12	927	—
15	Louisiana - -	608	195	803	—
21	Colorado - -	735	369	1,104	—
21	Tarifa - -	436	105	541	—
22	City of Boston - -	164	766	930	1
22	Erin - - -	882	303	1,185	—
25	Denmark - -	771	261	1,032	—
25	City of New York -	937	—	937	1
28	Nebraska - -	799	390	1,189	—
28	Palmyra - -	325	159	484	—
29	Helvetia - -	883	316	1,199	—
29	City of Antwerp -	647	356	1,003	2
29	City of Washington -	1,012	—	1,012	7
May 5	Malta - -	311	288	599	—
5	Manhattan - -	852	258	1,110	—
6	Pennsylvania - -	637	311	948	—
6	City of Paris -	715	303	1,018	—
8	Etna - -	823	—	823	2
11	Tripoli - -	432	84	516	1
13	City of London -	877	227	1,104	1
13	France - -	1,100	170	1,270	—
14	City of Limerick -	663	—	663	3
19	Minnesota - -	874	271	1,145	—
19	Aleppo - -	372	182	554	—
20	Virginia - -	822	241	1,063	4
20	City of Baltimore -	792	130	922	—
26	Siberia - -	511	175	686	—
27	Louisiana - -	601	317	918	—
27	City of Boston -	847	51	898	—
28	City of New York -	348	661	1,009	5
June 2	Tarifa - -	499	71	570	1
2	Colorado - -	902	210	1,112	—
3	City of Antwerp -	600	344	944	—
3	Erin - - -	788	332	1,120	—
5	City of Washington -	845	92	937	1
9	Palmyra - -	262	104	366	—
10	City of Paris -	1,016	—	1,016	1
11	Nebraska - -	490	95	585	—
12	Helvetia - - -	625	126	751	—
16	Malta - -	346	42	388	1
16	Manhattan - -	566	168	734	1
	Carried forward -	43,861	14,812	58,673	44

Date of Clearance.	Name of Ships.	Ships reported.			
		Nos. embarked at Liverpool.	Nos. embarked at Cork.	Total.	Deaths.
1868.	Brought forward -	43,861	14,812	58,673	44
June 17	City of London -	745	409	1,154	2
19	Etna - -	774	25	799	3
19	Denmark - -	454	132	586	—
24	City of Baltimore -	834	40	874	—
24	France - -	853	149	1,002	3
30	Aleppo - -	356	42	398	—
30	Minnesota - -	1,001	175	1,176	—
July 1	Virginia - - -	283	110	393	—
1	City of Boston - -	395	247	642	—
4	City of Cork - -	547	—	547	2
7	Tarifa - - -	360	97	457	—
8	Pennsylvania -	389	108	497	1
8	City of Antwerp -	486	112	598	—
14	Colorado - -	1,138	16	1,154	—
15	Louisiana - -	253	105	358	—
15	City of Paris -	586	81	667	—
18	City of New York -	590	117	707	3
21	Palmyra - -	223	72	295	—
21	Nebraska - -	376	182	558	—
22	City of London -	588	149	737	—
22	Erin - - -	232	81	313	—
28	Manhattan - -	382	115	497	1
28	Malta - -	318	132	450	—
29	Helvetia - -	255	90	345	1
29	City of Baltimore -	496	30	526	—
Aug. 1	Etna - - -	351	100	451	1
4	Siberia - -	351	39	390	—
5	City of Boston -	535	29	564	—
5	Denmark - -	266	71	337	—
11	Minnesota - -	603	131	734	—
11	Aleppo - - -	355	22	377	—
12	City of Antwerp -	595	102	697	2
13	Virginia - -	322	78	400	—
15	City of Washington -	293	193	486	—
18	Tripoli - -	337	4	341	—
19	City of Paris - -	787	36	823	—
19	France - -	562	94	656	1
25	Tarifa - - -	273	99	372	—
25	Colorado - -	522	84	606	—
26	City of London -	720	221	941	1
26	Pennsylvania - -	441	69	510	—
29	City of Cork - -	258	145	403	—
Sept. 1	Nebraska - -	410	104	514	—
1	Palmyra - -	304	76	380	1
2	Louisiana - -	422	88	510	—
2	City of Baltimore -	769	72	841	1
8	Malta - - -	318	92	410	—
8	Manhattan - -	459	124	583	—
9	Erin - - -	313	111	424	1
	Carried forward -	67,341	19,812	87,153	68

Date of Clearance.	Name of Ships.	Ships reported.			
		Nos. embarked at Liverpool.	Nos. embarked at Cork.	Total.	Deaths.
1868.	Brought forward -	67,341	19,812	87,153	68
Sept. 9	City of Boston - -	574	91	665	—
12	City of New York -	551	5	556	—
15	Siberia - -	286	69	355	—
16	City of Antwerp -	688	229	917	1
16	Helvetia - -	382	110	492	—
22	Aleppo - -	307	55	362	—
22	Minnesota - -	597	155	752	—
23	Denmark - -	530	346	876	—
23	City of Paris - -	768	164	932	—
26	City of Washington -	311	143	454	—
29	Samaria - -	397	65	462	—
30	Virginia - -	332	139	471	—
30	City of London -	775	153	928	—
Oct. 6	Tripoli - -	386	81	467	—
6	Colorado - -	621	144	765	3
7	City of Baltimore -	656	127	783	2
7	France - -	276	64	340	—
10	City of Cork - -	171	2	173	—
13	Nebraska - -	440	69	509	—
13	Palmyra - -	262	27	289	—
14	Pennsylvania - -	442	124	566	—
14	City of Boston - -	809	85	894	3
20	Manhattan - -	520	107	627	2
20	Tarifa - - -	392	116	508	—
21	City of Antwerp -	483	257	740	1
22	Erin - - -	320	88	408	—
24	Etna - -	213	—	213	—
27	Siberia - -	316	54	370	—
28	City of Paris -	636	144	780	—
Nov. 3	Aleppo - -	343	29	372	—
3	Minnesota - -	509	73	582	—
4	City of London -	317	90	407	—
4	England - -	479	109	588	—
7	City of Washington -	140	9	149	1
10	Samaria - -	271	37	308	—
11	City of Baltimore -	330	83	413	—
12	Denmark - -	181	58	239	—
17	Colorado - -	492	74	566	—
17	Tripoli - -	233	50	283	—
18	City of Boston - -	328	70	398	—
18	France - -	294	89	383	—
21	City of New York -	123	—	123	1
24	Nebraska - -	167	46	213	—
25	City of Antwerp -	324	65	389	—
28	Cuba - -	354	8	362	1
Dec. 1	Manhattan - -	156	18	174	—
1	Palmyra - -	123	63	186	—
2	City of Paris -	309	68	377	—
2	The Queen - -	196	74	270	1
	Carried forward -	86,451	24,138	110,589	84

Date of Clearance.	Name of Ships.	Ships reported. Nos. embarked at Liverpool.	Nos. embarked at Cork.	Total.	Deaths.
1868.	Brought forward -	86,451	24,138	110,589	84
Dec. 5	Java - - -	266	6	272	—
5	City of Cork - -	63	3	66	—
8	Tarifa - -	124	21	145	—
9	City of London -	235	43	278	—
12	Australasian - -	199	14	213	—
15	Siberia - -	100	—	100	—
15	Minnesota - -	216	39	255	—
16	City of Baltimore -	203	55	258	—
16	England - -	161	26	187	—
19	City of Manchester -	108	6	114	1
23	Etna - -	128	12	140	1
26	China - -	187	5	192	1
29	Colorado - -	121	16	137	—
30	City of New York -	110	22	132	—
	Total -	88,672	24,406	113,078	87
	For Boston.				
March 13	Delaware - -	63	93	156	—
April 7	Propontis - -	189	222	411	—
May 19	Delaware - -	352	398	750	—
June 3	Melita - -	186	134	320	—
17	Propontis - -	197	123	320	—
July 28	Melita - -	173	136	309	—
Oct. 20	Louisiana - -	53	81	134	—
	Total -	1,213	1,187	2,400	—
	For Baltimore.				
May 13	Somerset - -	194	—	194	—
	For Portland.		Nos. embarked at London-derry.		
Jan. 2	Nestorian - -	104	30	134	—
9	Belgian - - -	66	65	131	—
16	Austrian - -	78	24	102	—
23	Hibernian - -	84	39	123	—
30	Nova Scotian -	96	42	138	—
	Carried forward -	428	200	628	—

Date of Clearance.	Name of Ships.	Ships reported. Nos. embarked at Liverpool.	Nos. embarked at Londonderry.	Total.	Deaths.
1868.	Brought forward -	428	200	628	—
Feb. 6	Peruvian - -	115	59	174	—
13	Nestorian - -	119	38	157	—
20	Belgian - -	111	52	163	—
27	Austrian - -	157	123	280	—
Mar. 5	Hibernian - -	105	86	191	—
12	Nova Scotian -	151	95	246	—
19	Peruvian - -	150	91	241	—
26	Nestorian - -	297	197	494	—
April 2	Belgian - - -	331	71	402	3
9	Austrian - -	263	112	375	—
Nov. 12	North American -	178	35	213	—
19	Damascus - -	170	38	208	—
26	Peruvian - -	101	26	127	—
Dec. 3	Nestorian - -	75	35	110	—
10	Hibernian - -	74	11	85	—
17	Austrian - -	99	21	120	—
24	North American -	66	14	80	—
31	Moravian - -	71	14	85	—
	Total -	3,061	1,318	4,379	3
	For Canada.				
April 16	Hibernian - -	567	3	570	1
23	Moravian - -	533	109	642	—
30	Peruvian - -	592	—	592	—
May 7	Nestorian - -	609	119	728	—
9	Germany - -	1,060	—	1,060	—
14	Nova Scotian -	676	69	745	—
21	Austrian - -	717	137	854	—
28	Hibernian - -	454	85	539	—
29	Belgian - -	706	*33	739	—
June 11	Peruvian - -	577	—	577	—
18	Nestorian - -	376	38	414	—
25	Nova Scotian - -	286	46	332	—
July 2	Austrian - -	472	5	477	2
9	Hibernian - -	300	44	344	—
16	Moravian - -	298	2	300	—
23	Peruvian - -	428	34	462	—
30	Nestorian - -	274	13	287	—
Aug. 6	Nova Scotian -	247	37	284	—
13	Austrian - -	346	74	420	—
20	Hibernian - -	377	58	435	—
27	Moravian - -	302	13	315	—
Sept. 3	Peruvian - - -	398	25	423	—
10	Nestorian - -	388	20	408	—
17	Nova Scotian - -	274	8	282	—
	Carried forward -	11,257	972	12,229	3

* Embarked at Dublin.

Date of Clearance.	Name of Ships.	Ships reported.			
		Nos. embarked at Liverpool.	Nos. embarked at Londonderry.	Total.	Deaths.
1868.	Brought forward -	11,257	972	12,229	3
Sept. 24	Austrian - -	361	62	423	—
Oct. 1	Hibernian - -	265	65	330	—
8	Moravian - -	425	66	491	—
15	Peruvian - -	269	45	314	1
22	Nestorian - -	337	34	371	—
29	Nova Scotian -	163	21	184	—
Nov. 5	Austrian - -	157	24	181	—
	Total -	13,234	1,289	14,523	4

SUMMARY.

Ships cleared out for	Nos. embarked.	No. of Deaths.	Per-centage of Deaths.
Sailing Vessels.			
New York - - -	6,123	45	·73
Philadelphia - -	449	—	—
	6,572	45	·68
Steam Vessels.			
New York - - -	113,078	87	·07
Boston - - -	2,400	—	—
Baltimore - - -	194	—	—
Portland - - -	4,379	3	·06
Canada - - -	14,523	4	·02
Total - -	134,574	94	·06

Government Emigration Board,
8, Park Street, Westminster, 4th May 1869.

S. Walcott

Appendix No. 26.

Table showing the Mortality in Passenger Ships that cleared from the Clyde during the year 1868 (so far as Reports have been received).

Date of Clearance.	Name of Ships.	Ships reported.			
		Nos. embarked at Glasgow.	Nos. embarked at Cork.	Total.	Deaths.
1868.	For the United States.				
Jan. 1	Europa	92	59	151	2
8	United Kingdom	43	55	98	—
15	Columbia	64	56	120	—
22	Caledonia	40	30	70	1
29	Iowa	27	50	77	—
Feb. 5	Britannia	58	59	117	—
12	Hibernia	69	104	173	—
19	Europa	99	215	314	—
26	United Kingdom	90	247	337	1
Mar. 4	Columbia	110	235	345	—
11	Caledonia	208	236	444	1
18	Britannia	155	174	329	—
25	Hibernia	247	226	473	—
April 1	Europa	149	121	270	—
8	Iowa	184	195	379	—
13	United Kingdom	76	79	155	2
17	Columbia	218	303	521	—
24	Caledonia	234	204	438	1
May 1	Britannia	247	223	470	—
8	Hibernia	250	197	447	—
15	Europa	243	207	450	—
22	Iowa	361	203	564	—
29	Columbia	404	126	530	—
June 5	Caledonia	407	72	479	1
12	Britannia	321	142	463	—
19	Hibernia	197	130	327	1
26	Europa	225	90	315	—
July 3	Iowa	173	89	262	—
10	Columbia	169	67	236	—
17	Caledonia	214	81	295	—
24	Britannia	167	62	229	—
31	Hibernia	186	85	271	—
Aug. 7	Europa	227	105	332	—
14	Iowa	182	53	235	—
21	Columbia	299	90	389	1
28	Caledonia	199	93	292	—
Sept. 4	Britannia	213	94	307	—
12	Hibernia	244	108	352	—
18	Europa	290	104	394	—
25	Iowa	154	110	264	—
Oct. 2	Columbia	165	123	288	—
9	Caledonia	226	96	322	1
16	Britannia	139	78	217	—
23	Hibernia	175	56	231	—
	Carried forward	8,240	5,532	13,772	12

Date of Clearance.	Name of Ships.	Ships reported. Nos. Embarked at Glasgow.	Nos. Embarked at Cork.	Total.	Deaths.
1868.	Brought forward -	8,240	5,532	13,772	12
Oct. 30	Europa - -	142	44	186	2
Nov. 9	Columbia - -	60	47	107	—
13	Iowa - - -	145	80	225	—
20	Caledonia - -	127	46	173	—
27	Britannia - -	68	39	107	—
Dec. 4	United Kingdom -	86	37	123	—
11	Europa - -	113	25	138	—
19	Acadia - - -	87	—	87	—
	Total - -	9,068	5,850	14,918	14

Date of Clearance.	Name of Ships.	Ships reported. Nos. Embarked at Glasgow.	Nos. Embarked at Liverpool.	Nos. Embarked at Londonderry.	Nos. Embarked at Dublin.	Total.	Deaths.
1868.	For Canada.						
April 15	St. Andrew -	113	—	114	47	274	—
22	St. George -	45	—	—	54	99	—
28	St. David -	52	431	—	48	531	—
May 5	St. Patrick -	50	—	52	63	165	—
12	Damascus -	61	243	—	65	369	—
19	Ottawa -	72	472	—	38	582	—
June 2	St. Andrew -	206	237	—	—	443	—
9	St. David -	132	—	60	40	232	—
17	St. Patrick -	70	—	—	32	102	—
23	Damascus -	52	194	—	46	292	—
July 1	Ottawa -	58	—	62	48	168	—
15	St. Andrew -	124	—	43	38	205	—
29	St. David -	99	—	55	—	154	—
Aug. 4	Damascus -	40	190	—	36	266	—
12	Ottawa -	144	—	—	19	163	—
18	St. Patrick -	31	54	—	—	85	—
26	St. Andrew -	101	—	26	25	152	—
Sept. 3	St. David -	44	84	—	—	128	—
9	St. George -	39	—	95	—	134	—
16	Damascus -	62	—	56	—	118	—
Oct. 7	St. Andrew -	123	—	—	—	123	—
	Total -	1,718	1,905	563	599	4,785	—

Date of Clearance.	Name of Ships.	Ships reported.	
		Nos. embarked.	Deaths.
1868.	For New Zealand.		
Feb. 13	Caribou - - - - -	95	—
May 16	Helenslee - - - - -	137	1
June 24	Schleswig Bride - - -	268	4
Aug. 3	William Davie - - -	210	1
Sept. 4	Robert Henderson - - -	84	2
	Total - - -	794	8

SUMMARY.

Ships cleared out for	Nos. embarked.	No. of Deaths.	Per-centage of Deaths.
Steam Ships:			
United States - - -	14,918	14	·03
Canada - - - - -	4,785	—	—
Sailing Vessels:			
New Zealand - -	794	8	1·00
Total - -	20,497	22	·10

Government Emigration Board,
8, *Park Street, Westminster, 4th May* 1869.

S. Walcott.

Appendix No. 27.

Table showing the Mortality in Sailing Vessels that cleared from Londonderry during the year 1868.

Date of Clearance.	Name of Ships.	Ships reported.		
		Nos. embarked.	No. of Deaths.	Per-centage.
1868.	For the United States.			
April 4	Village Belle - - -	225	—	—
25	Minnehaha - - - -	181	—	—
May 20	Stadacona - - -	192	2	—
Aug. 11	Village Belle - - -	154	—	—
	Total - -	752	2	·26

Government Emigration Board,
8, Park Street, Westminster, 4th May 1869.

S. Walcott.

Appendix No. 28.

Summary of the Mortality in Sailing and Steam Vessels which conveyed Passengers to the United States, British North America, and Australasia during the year 1868 (so far as Reports have been received).

—	United States.			British North America.			Australasia.		
	Nos. embarked.	No. of Deaths.	Per-centage of Deaths.	Nos. embarked.	No. of Deaths.	Per-centage of Deaths.	Nos. embarked.	No. of Deaths.	Per-centage of Deaths.
Sailing Vessels -	7,324	47	·64	—	—	—	794	8	1·00
Steam Vessels -	134,969	104	·07	19,308	4	·02	—	—	—

Note.—Ships chartered by the Emigration Commissioners are not included in this return.

Government Emigration Board,
8, Park Street, Westminster, 4th May 1869.

S. Walcott.

Appendix No. 29.

Table showing the Number of Passenger Ships and Emigrants despatch in 1868 from the United Kingdom; the Number of such Ships Wreck or Destroyed at Sea, and the Number of Lives so Lost, so far as at prese known.

Ships chartered by the Emigration Commissioners.

Ports.	No. of Ships.	No. of Passengers.		No. of Crew.	Total Crew and Passengers.	No. of Ships lost.	No. of Lives lost.	Remarks.
		Commissioners' Emigrants.	Private Passengers.					
London -	3	200	33	57	290	—	—	
Liverpool	2	864	4	114	982	—	—	
Plymouth	5	2,069	9	195	2,273	—	—	
Total -	10	3,133	46	366	3,545	—	—	

Private Passenger Ships from Ports under the Superintendence of Government Emigration Officers.

Ports.	No. of Ships.	No. of Passengers.	No. of Crew.	Total Crew and Passengers.	No. of Ships lost.	No. of Lives lost.	Remarks.
London -	48	5,939	2,149	8,088	—	—	
Liverpool -	293	*118,805	26,413	145,218	—	—	
Plymouth -	—	†472	—	472	—	—	
Glasgow -	80	11,841	4,692	16,533	—	—	
Cork -	—	‡25,155	—	25,155	—	—	
Londonderry -	§4	‖9,829	98	9,927	—	—	
Total -	425	172,041	33,352	205,393	—	—	

* Inclusive of 2,175 passengers embarked on board Vessels which had previously cleared at Glasgow.
† Embarked on board Vessels which had previously cleared at London.
‡ Do. do. Liverpool.
§ Exclusive of the Ships and their Crews from Liverpool and Glasgow calling to take in Passengers.
‖ Inclusive of 9,077 Passengers embarked on board Vessels which had previously cleared at Liverpool Glasgow.

PRIVATE PASSENGER SHIPS not under the Superintendence of Government Emigration Officers.

PORTS.	No. of Ships.	No. of Passengers.	No. of Ships lost.	No. of Lives lost.	REMARKS.
deen - -	1	90	—	—	
n - -	—	*675	—	—	
Total - -	1	765	—	—	

* These embarked on board Vessels which had previously cleared at Glasgow.

SUMMARY.

—	SHIPS.			PASSENGERS AND CREW.			—
	No. despatched.	No. wrecked.	Percentage.	No. embarked.	No. of Lives lost.	Percentage.	
chartered by Emigration nmissioners -	10	—	—	3,545	—	—	
despatched from ts under the erintendence of vernment Emition Officers -	425	—	—	205,393	—	—	
despatched from ts not under the erintendence of vernment Emition Officers -	1	—	—	765	—	—	
	436	—	—	209,703	—	—	

Government Emigration Board,
rk Street, Westminster, 4th May 1869.

S. WALCOTT.

Appendix No. 30.

Table showing the Number of Passenger Ships and Emigrants despatched from the United Kingdom; the Number of such Ships wrecked or destroyed at Sea; and the Number of Lives so lost, so far as known, from 1847 to 1868, both inclusive.

	Ships.			Passengers and Crew.		
	Number despatched.	Number wrecked.	Per-centage.	Number embarked.	Number of Lives lost.	Per-centage.
Ships chartered by the Emigration Commissioners - -	1,099	5	·45	382,739	*543	·14
Ships despatched from Ports under the superintendence of Government Emigration Officers - -	17,332	77	·44	4,551,671	5,346	·11
Ships despatched from Ports not under the superintendence of Government Emigration Officers -	1,585	19	1·19	126,425	136	·10
Total - -	20,016	101	·50	5,060,835	6,025	·11

* These were the passengers and crew of the "Guiding Star," which sailed from Liverpool for Melbourne on the 9th January 1855, was spoken with at sea on the 15th February, and not afterwards heard of.

Government Emigration Board,
8, *Park Street, Westminster, 4th May* 1869.

S. Walcott.

Appendix No. 31.

Hongkong.

Sir Richard Graves MacDonnell, Knight, C.B., Governor and Commander-in-Chief.

An Ordinance (No. 12. of 1868) enacted by the Governor of Hongkong, with the Advice of the Legislative Council thereof, for repealing the "Hongkong Emigration Ordinance, 1867," and for better securing the Health and Protection of Emigrants in Chinese Passenger Ships clearing from Hongkong. [13th October 1868.] Title.

Whereas it has become necessary to repeal the "Hongkong Emigration Ordinance, 1867," and amend the provisions for securing the Health of Emigrants in Chinese Passenger Ships clearing from Hongkong: Be it enacted by the Governor of Hongkong, with the advice of the Legislative Council thereof, as follows:— Preamble.

I. The "Hongkong Emigration Ordinance, 1867," shall be and the same hereby is repealed. Repeal of "Hongkong Emigration Ordinance, 1867."

II. This Ordinance may be cited for all purposes as "The Hongkong Emigration Ordinance, 1868." Short title.

III. In the Interpretation of this Ordinance the expression "Chinese Passenger Ship" shall mean every Ship carrying from any Port in the Colony of Hongkong and its Dependencies more than twenty Passengers being natives of Asia on any voyage of more than seven days' duration within the meaning of the "Chinese Passengers' Act, 1855," as defined by Section III. of Ordinance No. 9. of 1856. Interpretation of term "Chinese Passenger Ship."

IV. The Owners or Charterers of every Chinese Passenger Ship shall as soon as such ship is laid on for the conveyance of Chinese Emigrants provide a depôt or depôts, to be approved of by the Emigration Officer, wherein every intending Emigrant by such ship may lodge as herein-after provided, and every such depôt shall be maintained, and every Emigrant lodging therein shall be supported at the Expense of such Owners or Charterers. Depôts to be provided for the lodgment of Emigrants.

V. The Owners or Charterers of every Chinese Passenger Ship, or if absent from the Colony their respective agents, shall as soon as such ship is laid on for the conveyance of Chinese Emigrants give notice in writing of the fact to the Emigration Officer, specifying in such notice the name, destination, and probable time of departure of such ship, and the depôt or depôts in which the intending Emigrants by such ship are lodging or intended to be lodged before embarkation. Notice of ship being laid on as a Chinese Passenger Ship to be given to Emigration Officer.

VI. Every intending Emigrant in a Chinese Passenger Ship shall, unless exempted by the Emigration Officer, lodge at the least three clear days previously to his embarkation in the depôt provided by the Owners or Charterers of such ship with the approval of the Emigration Officer in pursuance of Section IV. Emigrants to lodge in depôt three clear days before embarkation.

Supervision of depôts.

VII. Every such depôt as aforesaid shall be under the supervision of the Emigration Officer, who may inspect the same at such times as he shall think fit, and there shall be at all times free ingress and egress allowed to all persons to and from such depôts, from 6 A.M. to 6 P.M.

Notice of every contract with Emigrants to be given to Emigration Officer.

VIII. Every Emigration Passage Broker who shall contract with any intending Emigrant for a passage in such ship shall forthwith give notice in writing to the Emigration Officer of every such contract, specifying the name, age, and sex of such Emigrant and the name of such Ship.

Governor authorized to appoint a Medical Officer at a salary not exceeding 2,000 dollars per annum.

IX. The Governor is hereby authorized to appoint at a salary not exceeding two thousand dollars per annum a Medical Officer, whose duty it shall be to inspect intending Emigrants and to supervise all matters and things in any way relating to the comfort and well-being of such Emigrants, both before their departure and on their voyage, and such salary shall be in lieu of all fees.

Medical Inspection.

X. The Medical Inspection of intending Emigrants by a Chinese Passenger Ship required by Ordinance No. 6. of 1859 shall take place on shore before embarkation as well as on board the said ship after embarkation, and the Emigration Officer shall not grant the Certificate required by the "Chinese Passengers' Act, 1855," unless he shall be satisfied that such double inspection has been duly made, or has been dispensed with by the sanction of the Governor.

No Emigrant to embark or be received on board without a Permit.

XI. It shall not be lawful for any Emigrant to embark in any Chinese Passenger Ship, or for the master or other person on board of a Chinese Passenger Ship to permit any Emigrant to embark therein, unless such Emigrant shall produce an Embarkation Permit from the Emigration Officer, who shall not grant the same unless he shall be satisfied that such Emigrant has undergone on shore the medical inspection required by law to be made before embarkation.

Emigration Officer to appoint time for Medical Inspection after embarkation.

XII. The Medical Inspection of Emigrants required to be made after their embarkation in any Chinese Passenger Ship shall take place at such time as the Emigration Officer shall appoint.

Fees how payable.

XIII. The fees heretofore payable to the Medical Practitioner effecting such inspection shall be paid in the first instance by the Emigration Passage Broker of such ship to the Emigration Officer, and by him be paid into the Treasury.

Chinese Medical Practitioners may be surgeons of Chinese Passenger Ships.

XIV. Any Chinese Medical Practitioner properly qualified to the satisfaction of the Colonial Surgeon shall be eligible with approval of the Governor for the office of Surgeon of a Chinese Passenger Ship within the terms of Schedule A. of the "Chinese Passengers' Act, 1855."

All Orders in Council to apply to Chinese Passenger ships.

XV. All Orders of Her Majesty the Queen in Council relating to the quantity of water to be carried by Passenger Ships having a certain description of condensing apparatus shall apply to Chinese Passenger Ships.

No Chinese Passenger Ship to clear between

XVI. No Chinese Passenger Ship, unless a vessel propelled by steam, bound to any Port westward of the Cape of Good Hope,

hall be permitted to clear from any port in the Colony between he months of May and September inclusive. May and September.

XVII. No Chinese Passenger Ship shall clear out or proceed to ea without strictly conforming to the regulations contained in chedule A. of the "Chinese Passengers' Act, 1855," except so ar as the said regulations are modified or altered by any of the rovisions of this Ordinance or may be inconsistent therewith ; nd except as aforesaid the said Regulations shall be and continue n full force and effect. Regulations of Schedule A. of "Chinese Passengers' Act, 1855," to be in force except as altered by this Ordinance.

XVIII. It shall be lawful for the Emigration Officer at any ime when he is satisfied that any Emigrant who is unwilling to eave the port has been obtained by any fraud, violence, or other mproper means, to land such Emigrant and procure him a passage back to his native place or that from which he was aken, and also to defray the cost of his maintenance whilst waiting a return passage, and all such expenses with all legal osts incurred shall be recoverable by the Emigration Officer efore any Police Magistrate from the Emigration Passage Broker f the vessel in which such Emigrant was shipped or intended to e shipped. Emigration Officer may land any Emigrant who is unwilling to leave the port, and who has been procured by any fraud, &c.

XIX. Whosoever shall unlawfully, either by force or fraud, ake away or detain against his will any man or boy with intent o put him on board a Chinese Passenger Ship, and whosoever hall with any such intent receive, harbour, or enter into any ontract for Foreign Service with any such man or boy, knowing he same to have been by force or fraud taken and obtained as in his section before mentioned, shall be guilty of felony, and being onvicted thereof shall be liable, at the discretion of the Court, o be kept in penal servitude for any term not exceeding seven ears and not less than three years, or to be imprisoned for any erm not exceeding two years with or without hard labour. Punishment for improperly obtaining Emigrants.

XX. Every Passage Broker shall be liable to make good all penalties and expenses chargeable to him under this Ordinance, as fully and in the same manner as he is now liable to make good penalties under Ordinance No. 11. of 1857. Passage Broker liable to make good all penalties, &c. in the same manner as under Ordinance No. 11. of 1857.

XXI. The Owners or Charterers of any Chinese Passenger Ship, and any Emigration Passage Broker, and any intending Emigrant by a Chinese Passenger Ship, and any Master or other Person in charge of a Chinese Passenger Ship who shall fail to comply with or commit any breach of the provisions of this Ordinance so far as they may respectively be bound thereby, and any person granting or knowingly uttering any forged certificate, permit, notice, or other document under this Ordinance, shall, without prejudice to any other proceeding, civil or criminal, be liable upon summary conviction before a magistrate to a fine not exceeding five hundred dollars, or to imprisonment, with or without hard labour, for any term not exceeding six months. Punishment of persons committing any breach of this Ordinance.

XXII. This Ordinance shall not come into operation until Her Majesty's Confirmation thereof shall have been proclaimed in the Colony by the Governor. Suspending clause.

Appendix No. 32.

Mauritius.

Ordinance.

(No. 31 of 1867.)

Henry Barkly.—*Enacted by the Governor of Mauritius and its Dependencies, with the advice and consent of the Council of Government thereof.*

An Ordinance to consolidate and amend certain of the Laws relating to Indian Immigrants and other Labourers within this Colony and its Dependencies, and to make better provision for the protection of claims for Wages; and for other purposes. [29th November 1867.]

Whereas it is expedient to consolidate and amend certain of the laws relating to Indian immigrants and other labourers within this Colony and its Dependencies, and to make better provision for the protection of claims for wages, and for other purposes :—

Be it therefore enacted by His Excellency the Governor, with the advice and consent of the Council of Government, as follows :—

Definition of the term "new immigrant."

I. The term "new immigrant" extends and applies to all male Indian labourers who have immigrated into this Colony or its Dependencies since the publication of Her Majesty's Order in Council of the 15th January 1842, or who may hereafter immigrate as above from British India, and for whose introduction passage-money has been or may hereafter be paid by the Government, or by any individual employer, and who have not completed an industrial residence of five years, as herein-after defined.

Do. "old immigrant."

The term "old immigrant" extends and applies to all male Indian labourers who have immigrated as above previous to the promulgation of the said Order in Council, or for whose introduction no such passage-money has been paid, or who shall at any time, now or hereafter, have completed their said industrial residence.

Do. "industrial residence."

The term "industrial residence" means a residence of five years in this Colony or its Dependencies, under written contract of service for hire and performance of such contract.

Do. "completion of industrial residence."

The "industrial residence" shall be deemed to have been completed :

1st.—By service under such contract, one or more, for the term of five years, testified by a discharge therefrom under the hand of a stipendiary magistrate.

2nd.—By redemption, as herein-after provided.

3rd.—By release, as herein-after provided.

4th.—By exemption by the Governor, as herein-after provided.

For the purposes of the present Ordinance, the term "requisitionist" extends and applies to any person who shall have made requisition for the introduction of immigrants to be specially engaged to him in India, or to be allotted to him on arrival in Mauritius, as the case may be. Do. "requisitionist."

For the purposes of the present Ordinance, the term "substituted employer" extends and applies: Do. "substituted employer."

1st.—To any person other than the requisitionist to whom any new immigrant shall, on arrival in Mauritius, be engaged under contract of service for the whole period of his industrial residence.

2nd.—To any person to whom any contract of service with a new immigrant shall have been transferred for the unexpired residue of the industrial residence of such immigrant, either by consent of parties or under the provisions of Article 7 of Ordinance 16 of 1862.

II. In case any requisitionist shall not claim the immigrants introduced under his requisition, whether specially engaged to him in India or otherwise, within seven days after their arrival at the depôt in Mauritius (such arrival having been duly published or notified in terms of the Regulations to be made under the provisions of this Ordinance), the Protector of Immigrants shall be at liberty to allot such immigrants to any other persons who may be willing to engage them. Such allotment may be made, if the Protector deem it necessary, upon payment of a less amount than the costs of introduction chargeable against the requisitionist; and the amount received shall be applied in reduction of the amount due to Government by such requisitionist in respect of the actual costs of introduction of the immigrants so unclaimed by him. Immigrants not claimed within 7 days may be allotted.

III. Contracts of service, whether made in India under the provisions of any law in force at the time being, or made in this Colony or its Dependencies before a stipendiary magistrate, are valid and binding for such term, not exceeding five years, as shall be stipulated in the contract. Contracts not exceeding 5 years with male labourers, legal.

The present article does not apply to contracts of service made with female immigrants, special provision having been made for the same by Art. 11 of Ord. 16 of 1862.

IV. No contract of service entered into in this Colony or its Dependencies with a new immigrant is valid unless made in writing before a stipendiary magistrate. New immigrant's contract to be made in writing.

V. Any person illegally employing, lodging, or harbouring a new immigrant not engaged under written contract shall, over and above any other penalty to which he may become subject, be liable to a penalty not less than 2*l.* and not exceeding 5*l.*, one half of which penalty may be awarded to the informer of the contravention of the law. Penalty for illegal employment of new immigrant.

The present article shall not apply to persons employing new immigrants in pursuance of any contract of service made in India under the provisions of any law in force at the time being.

Papers to be produced to magistrate on engagement.

VI. No engagement of any immigrant shall be passed before a stipendiary magistrate except upon production by such immigrant of his ticket, and either a certificate of discharge as prescribed in Ordinance No. 15 of 1852, or a certificate of the Protector of Immigrants to the effect that such immigrant is free to contract an engagement.

The stipendiary magistrate, on passing any such engagement, shall deliver to the employer the ticket of the immigrant, with the engagement noted thereon, which ticket the employer shall be bound to hand over to the stipendiary magistrate, with a certificate of discharge, at the termination of the engagement, or, in default thereof, to pay to the Government on behalf of the immigrant the price of a duplicate ticket, as fixed by the tariff in force at the time being.

Delivery of certificate to immigrant engaged.

VII. Upon the passing of a contract of service before a stipendiary magistrate between any immigrant and his employer, the magistrate shall deliver into the hands of the immigrant his certificate of engagement, which the latter shall have the right to retain in his possession during the whole term of his engagement, and shall deliver up to the stipendiary magistrate upon his discharge therefrom.

Any employer, or the agent of any employer, who shall take or retain possession of the certificate of engagement of any immigrant so engaged to the employer as aforesaid, shall be liable to a penalty not exceeding 5*l*.

Contracts with servants being minors.

VIII. No written contract of service shall be passed with any minor under the age of 10 years.

No written contract of service shall be passed with any minor above the age of 10 years and under the age of 15 years, unless with the consent of the parent or guardian of such minor.

Any minor of the full age of 15 years or upwards shall be free to engage under written contract of service, if the parent or guardian of such minor do not appear and object thereto at the time of passing such contract.

In case any minor above the age of 15 years shall have engaged under contract of service without the consent of his or her parent or guardian, such contract may, upon the application of the parent or guardian, and upon good and sufficient cause shown to the satisfaction of the stipendiary magistrate, after hearing the employer and such further evidence as the magistrate shall think fit, be cancelled.

Nothing in the present article contained shall be construed as invalidating any contract of service made in India.

Employment of immigrant children.

IX. If any new immigrant, on first introduction, be under the age of 10 years, he shall, on attaining that age, be liable to work for his introducer or substituted employer at the Government scale for the time being of wages and allowances, until the expiry of the term of industrial residence of the relative or friend under whose charge such immigrant shall have been introduced,

or for so much of such term as such relative or friend shall continue in the service of such employer.

Exemption from stamp duty.

X. No stamp duty or other impost is chargeable by or on behalf of Government in respect of passing any contract of service entered into between any new immigrant, and

1st.—The requisitionist at whose expense such immigrant shall have been introduced into the Colony, or those in his rights;

2nd.—The substituted employer of such immigrant, or those in his rights.

Rate of stamp duty.

XI. Saving in the above cases, all contracts of service entered into with new immigrants before a stipendiary magistrate shall be subject to a stamp duty at the rate of 1*l.* 12*s.* per annum, payable by the employer for the term of the engagement, or for so much thereof as may be requisite for the completion of the immigrant's industrial residence.

It shall, however, be lawful for the Protector of Immigrants to authorize the engagement of any new immigrant without payment of the above stamp duty, in any case where it shall appear to him necessary, in consequence of the bodily weakness or infirmity of such immigrant, so to do, in order to enable such immigrant to find employment.

Redemption of industrial residence by immigrant free from contract.

XII. Any new immigrant who, upon the expiration or other determination of any contract of service under which he has been engaged, shall be desirous of redeeming the remainder of his industrial residence, may do so by payment to the Protector of Immigrants, or to any other officer duly appointed to receive the same, of a sum calculated at the rate of 1*l.* 12*s.* per annum for the whole time required to complete his industrial residence; and thereupon he shall be entitled to receive a ticket of old immigrant.

Provided that for every fraction of a shilling calculated as payable in respect of redemption money, one shilling shall be charged.

Papers to be produced on payment of redemption money.

XIII. No redemption money shall be received from any new immigrant under the provisions of the preceding article, except upon production by him of his ticket and other documentary proof showing that he is free from engagement.

New immigrant may redeem for good cause.

XIV. Any new immigrant having good and sufficient reason, of a special and exceptional nature, for desiring to obtain his discharge from any contract of service under which he is engaged, may apply to the stipendiary magistrate of the district in which he is performing such contract, stating the reasons for which he is desirous of obtaining such discharge, and the magistrate shall thereupon give notice to the employer, and shall appoint a day for enquiring into the matter, and for hearing any evidence which the immigrant or his employer may respectively adduce.

The magistrate shall transmit to the Procureur General the proceedings upon such enquiry; and, in case the Procureur General shall be satisfied that good and sufficient reasons have as aforesaid been shown for granting such discharge, he may authorize the magistrate to grant the same upon previous

payment of indemnity by the immigrant to Government for the benefit of the employer.

Such indemnity shall be calculated upon the sum paid by the employer for costs of introduction, as certified by the Protector, or for the stamp duty upon engagement of such immigrant, as the case may be, and shall be proportionate to the unexpired term of service relatively with the whole term as stipulated in the contract.

Forfeiture of stamp duty and redemption money.

XV. In case any contract of service between a new immigrant and any of the employers mentioned in Art. 10, or any employer who shall have engaged such immigrant for the unexpired residue of his industrial residence, shall have been cancelled by a stipendiary magistrate, upon the complaint of the immigrant, under the provisions of any law in force at the time being, such employer shall have no right to any sum which may be received by the Government by way of stamp duty upon any subsequent contract of service entered into between such immigrant and another employer, nor to any sum which may be received by the Government in respect of any redemption of industrial residence by such immigrant.

Disposal of stamp duty and redemption money.

XVI. Saving in the case provided for by Art. 15, whenever any new immigrant shall have entered into a contract of service with any of the employers mentioned in Art. 10, and such contract shall for any cause whatever be determined prior to the completion of the term of industrial residence of such immigrant, such employer shall be entitled to demand and receive from the Government any sum which may have been received by the Government by way of stamp duty upon any subsequent engagement of such immigrant with a new employer, or in respect of any redemption of industrial residence by such immigrant.

Release from industrial residence.

XVII. The following employers are hereby empowered to release any new immigrant from the whole or any unexpired residue of the term of industrial residence:

1st.—Any one of the employers mentioned in Article 10.

2nd.—Any other employer who shall have entered into a contract of service with such immigrant for the unexpired residue of his industrial residence.

Provided that such release can only be effected during the currency of the contract of service with the employer desirous of effecting the release, or upon the expiration or other determination of such contract, and before the immigrant shall have engaged with any other employer.

Exemption from industrial residence.

XVIII. The Governor may, upon the certificate of the Protector of Immigrants or of a stipendiary magistrate, exempt, wholly or in part, from the obligation of industrial residence any new immigrant incapacitated from labour by infirmity, accident, sickness, or other cause, and not being at the time of such exemption under contract of service with any employer.

The Governor may further grant to any such immigrant a free passage back to India.

Every such exemption shall be registered in the Protector's Office.

XIX. In case any immigrant engaged under written contract of service shall, through infirmity, accident, sickness, or other cause, become permanently incapacitated from the performance of his contract, it shall be lawful for his employer, upon a certificate to that effect being given by a duly qualified medical practitioner, to send such immigrant to the Protector of Immigrants, and the contract of such immigrant shall thereupon be deemed and taken as cancelled. Contracts with infirm immigrants, prematurely terminated.

The expenses attending the care and maintenance of such immigrant up to the time of his being so sent, together with the cost of sending him to the Immigration Depôt, shall be defrayed by the employer.

XX. Whenever any party shall appear before a stipendiary magistrate for the purpose of passing a contract of service with a labourer, and the said magistrate shall have good grounds for believing that the said proposed contract is a fictitious contract, and that the parties thereto have no *boná fide* intention of executing the conditions thereof, or that the intended employer has not the means of paying the wages of the labourer, if engaged to him, it shall be in the discretion of the magistrate either to refuse to pass the contract or to postpone passing the same until the intended employer shall have proved to his satisfaction the *bona fides* of the proposed contract, or that he shall be able to pay the labourer's wages as they become due, as the case may be. Magistrate may refuse to pass contract in certain cases.

XXI. Whenever any stipendiary magistrate shall have reason to suspect that any written contract of service between an old immigrant and an alleged employer is a fictitious contract, and that the same is not being *boná fide* carried out, he shall have power to summon the parties before him, and if, after due enquiry, it shall appear to him that the employer and immigrant named in the said contract had at the time of passing the same no *boná fide* intention of carrying out the same, and that the relationship of master and servant does not *de facto* exist between the parties,—in any such case the magistrate shall have power to cancel and annul such contract. Magistrate may cancel fictitious contract.

XXII. No labourer engaged for field labour shall be bound to work more than nine hours per day, exclusive of the hour for breakfast. Whether he be employed at day-work or task-work, he shall be entitled to have one full hour for breakfast, before 10 a.m. Duration of day's labour.

XXIII. It shall be optional with the employer of any labourer engaged for field labour, to require the latter to work by task-work, giving him such daily tasks as can reasonably be required of him. If any question arise as to the reasonableness of any task, the same shall be decided by the stipendiary magistrate, who may, if he think fit, take the advice of one or two competent appraisers, who shall, in such case, take an oath before him to execute such duty truly and faithfully. Task-work.

The cost of appraisement, which shall not exceed 1*l.* per appraiser, shall be borne by the losing party.

Labourers' dwellings.

XXIV. Every person employing labourers upon a country estate shall provide them with sufficient and wholesome lodging, according to the usage of the colony; and whenever it shall be proved to the satisfaction of the stipendiary magistrate of the district that the lodging of any labourer is insufficient, unhealthy, or otherwise unfit to be inhabited by such labourer, the said magistrate shall order that, within a certain period to be by him fixed, the employer shall cause such dwelling to be altered or repaired, so as to render it wholesome and sufficient, or another dwelling to be supplied to the labourer; and he may require the employer to make the labourer an allowance or indemnity of threepence for each day from the date of his order until the labourer be properly lodged, to the satisfaction of the said magistrate; and any master failing to comply with any such order of the magistrate shall be liable to a fine not exceeding 5*l.*, and the labourer shall be entitled to demand cancellation of his contract.

Master though a minor may be condemned to pay wages.

XXV. Whenever any employer shall have been summoned before a stipendiary magistrate upon the complaint of any manager, employé, or labourer in his service, the plea of infancy, if set up and established by such employer, shall be no valid or sufficient defence to such complaint. If it be proved to the satisfaction of the magistrate that the complainant has been actually employed in the service of the minor, he shall deal with the complaint in the same manner as if the employer were of full age.

Definition of "labourer."

XXVI. The word "labourer" in Article 17 of Ordinance No. 15 of 1852 extends to all persons working for any employer as domestic servants, field labourers, handicraftsmen, or overseers of labour, whether of Indian or other extraction, whose wages, irrespective of allowances, shall not exceed 4*l.* per month.

Definition of "gens de service."

XXVII. The term "gens de service," as used in Article 2101 of the Civil Code, extends and applies to the several classes of persons mentioned in the preceding article.

Privilege for wages limited to one year preceding judgment.

XXVIII. The privilege for arrears of wages conferred upon the several above-mentioned classes of persons as "gens de service" under the said Article 2101 of the Civil Code is hereby limited to arrears of wages due for any period not exceeding one year next preceding the judgment of the stipendiary magistrate condemning the employer to the payment of such arrears.

Claim for wages admitted to privilege though tardily produced.

XXIX. The said privilege shall be admitted in its proper rank as established by the Civil Code, in any distribution by way of contribution of monies belonging to the employer, or in any distribution by way of order of the sale price of the immoveable property of the employer, at whatever date subsequent to the judgment such distribution of either kind shall take place; provided the parties producing such privileged claim justify that they have used due diligence to enforce payment of their claim, and that they have been unavoidably prevented from obtaining payment at an earlier period.

Provided also, that several judgments in favour of the same party shall in no case entitle him to claim payment of wages by

way of privilege for more than the period to which such privilege is limited as above, which period shall be computed backwards from the date of the last of such judgments.

XXX. The manager and employés upon an estate other than the gens de service as herein-before defined have a privilege for arrears of salary taking rank immediately after the privilege of the said gens de service, and limited to six months next preceding the judgment condemning the employer to the payment of such salaries. Privilege of employés' salary.

The privilege of the several parties above mentioned shall be admitted in its rank, as hereby established, in the same manner and subject to the same conditions as is herein-before provided for the privilege of the gens de service.

XXXI. The said claims for salary are cognizable by the stipendiary magistrate in the same manner, to all intents and purposes, as claims for wages due to labourers. Salary of employés, &c. within jurisdiction of stipendiary magistrate.

XXXII. The provisions of Art. 1781 of the Civil Code are not applicable to any proceedings before a stipendiary magistrate for the recovery of any arrears of wages or salary claimed by any person from his employer. Art. 1781 Civil Code not applicable to claims for wages.

XXXIII. Any judgment of a stipendiary magistrate condemning an employer to the payment of wages or salary may, at any time before such judgment shall have been satisfied, be attacked by *Tierce opposition* on the ground that such judgment has been obtained by fraud or collusion. *Tierceopposition* in judgments obtained by fraud, &c.

The said stipendiary magistrate shall have jurisdiction, and shall be bound to hear and determine such *Tierce opposition*.

The party forming the same, if he fail therein, shall be condemned to pay all costs of suit.

XXXIV. No opposition or attachment lodged in the hands of any stipendiary magistrate or district cashier against any monies payable to labourers for arrears of wages shall be valid or effectual. The sums so payable shall be paid to the labourers entitled to receive the same, any such opposition or attachment notwithstanding. Oppositions to wages deposited not valid.

XXXV. In case any domestic servant shall have obtained judgment against his employer for arrears of wages, no seizure of moveables made in the house or premises of the employer shall be set aside or invalidated on the ground that such moveables are the property of the wife of the employer, unless she be living apart from her husband under judicial authority. When the wife's goods will be free from seizure for wages.

XXXVI. When a certificate of discharge sent or produced to a magistrate under Article 4 of Ordinance No. 15 of 1852 shall state that any amount of wages remains unpaid to the labourer discharged, the magistrate shall, upon the production of the certificate, condemn the employer to pay to the labourer the wages which appear to be due to him, granting a reasonable delay for the payment into court of the amount so due. Recovery of wages noted as due on certificate of discharge.

XXXVII. Whenever a stipendiary magistrate shall have given a judgment condemning an employer to the payment of any sum for arrears of wages or salaries, any third party may obtain subrogation into the rights and privilege of the labourers or Subrogation in claims for wages.

employés under such judgment, by paying into the hands of the stipendiary magistrate the amount due under such judgment, and by thereupon obtaining from the magistrate a subrogative receipt, under the hand and seal of the magistrate, for the amount paid, which receipt the magistrate shall be bound, if required, to give at the time of the money being paid.

Seizure of real estate for wages.

XXXVIII. Whenever, in execution of any judgment for compensation or wages, there shall not have been found sufficient goods and chattels to satisfy the said judgment, the stipendiary magistrate may issue a writ of execution against any real estate belonging to the debtor, in whatever district the same may be situated; but no such writ of execution shall be acted upon without the authority of one of the Judges of the Supreme Court, and the return of such writ shall be made to the Registrar of the said Court.

Upon such authority being obtained, the writ shall be notified to the employer in the form of a "Commandement"; and the seizure shall thereupon be made subject to the delays prescribed by law between the "Commandement" and the seizure.

The proceedings of the sale of such estate shall be made and taken under the authority of the Supreme Court, in the form and manner prescribed by the law existing at the time being.

If such estate be already under seizure, the creditor under any such judgment as aforesaid may ask of the Master of the Supreme Court subrogation in the seizure, upon the simple production of the said writ of execution issued by the stipendiary magistrate as aforesaid.

Old immigrants' portrait ticket.

XXXIX. The Protector of Immigrants shall, upon proof to him of any immigrant having duly completed his industrial residence, register such immigrant as an old immigrant, giving him a ticket as such, with his portrait thereon, and in the form of the Schedule hereunto annexed.

No fee shall be charged for any such ticket, but the cost of the portrait affixed thereto shall be paid by the immigrant according to the rate fixed by the Regulations in that behalf.

Recal of old immigrants' tickets without portraits.

XL. All tickets which, prior to the passing of this Ordinance, shall have been issued by the Protector to old immigrants without portraits affixed thereto, shall be delivered up to the Protector, who, in lieu thereof, shall deliver to such immigrants tickets as prescribed by Art. 39.

Portrait ticket to be produced on engagement of old immigrants.

XLI. At and after the expiration of three calendar months from the date when this Ordinance shall come into operation, no contract of service shall be passed before any stipendiary magistrate between any employer and an old immigrant, excepting upon production by such immigrant of a ticket in the form prescribed in Article 39.

Old immigrants' tickets without portraits to be null after a certain date.

XLII. At and after the last-mentioned period, no ticket other than in the form prescribed in Article 39 shall be of any avail as proof of the status of old immigrant of the party described therein. And the holder of any ticket other than in the above form shall be liable to be detained and forwarded to the Protector of Immigrants.

The present article shall not apply to any immigrant engaged under written contract of service entered into prior to the said period fixed in Article 41 and still unexpired.

Provided always, that any such immigrant shall be bound, upon being discharged from such contract of service, to appear forthwith before the Protector of Immigrants, and to exchange his ticket as aforesaid.

Declaration of abode, &c. to be made by old immigrant.

XLIII. Every old immigrant not under engagement by written contract of service shall be bound to appear at the Central Station of Police for the district in which he is resident, and then and there to justify to the inspector of police or such other officer as shall be designated in that behalf by Regulation to be made as herein-after provided, his status of old immigrant by production of his ticket, and further to declare to the said officer his place of abode, and occupation, employment, or other means of subsistence. The said officer shall thereupon deliver to such immigrant a pass in the form provided by Regulations to be made under this Ordinance; the counterpart whereof shall be filled up and kept on record at the said Central Station.

Every immigrant on completing his industrial residence and receiving an old immigrant's ticket, and every old immigrant on the expiry of his written contract, shall, within eight days (unless before the expiry of that time he shall re-engage under written contract of service), appear before the said officer of police of the district in which he resides or has taken up his abode, and shall make declaration as above, whereupon the said officer shall issue his pass as herein-before provided.

New declaration on change of abode.

XLIV. Every old immigrant having obtained such pass as aforesaid shall be bound, on change of residence, to appear before the inspector or other officer of police as aforesaid of the district in which he resides or is about to reside, as the case may be, and shall obtain from the said officer a new pass in similar form to his former pass, which he shall deliver up to the said officer. On the new pass shall be endorsed the number and date of any former pass, and the district from which the same shall have been issued.

Pass to be produced on engagement with old immigrant.

XLV. At and after the expiration of three calendar months from the date when this Ordinance shall come into operation, no contract of service shall be passed before any stipendiary magistrate between any old immigrant and an employer, except upon production by such immigrant of a pass duly issued to him under the provisions of the two last preceding articles.

Nevertheless such pass shall not be necessary if such engagement be entered into within eight days following the completion of any previous written contract of service, or of industrial residence.

Old immigrant not producing pass or certificate, liable to arrest as vagrant.

XLVI. At and after the period fixed in Art. 45, any old immigrant not being engaged under written contract of service passed prior to the above period, who shall fail, on demand of any magistrate, or of the police, to produce his pass issued under the provisions of the said Articles 43 or 44, or a certificate of engagement duly signed by a stipendiary magistrate, shall be

liable to be detained and forwarded to the Immigration Depôt, and be there further detained until enquiries shall have been made about him ; and if, upon the result of such enquiries, it shall appear that he is not following any *bonâ fide* employment, whether on his own account or in the service of a third party, and that he has no visible means of subsistence, he shall be deemed and taken to be a vagrant, and may be dealt with as such. If, upon the result of such enquiries, it shall appear that he is not a vagrant, he may be sent back to the district in which he resides, to obtain a pass under the provisions of Articles 43 or 44.

Penalty for obtaining pass on false declaration.

XLVII. Whenever any stipendiary magistrate shall have reasonable grounds for thinking that any old immigrant to whom shall have been issued a pass under the provisions of Articles 43 or 44, is not *bonâ fide* resident, occupied, or employed in the manner declared by such immigrant on obtaining his said pass, or that such immigrant is without any fixed place of residence, or without any *bonâ fide* occupation, employment, or means of subsistence, it shall be lawful for such magistrate to issue a summons ; and, in default of compliance therewith, to issue a warrant for the appearance before him of such immigrant; and if, after due investigation, the said magistrate shall be satisfied that the said immigrant has falsely declared any of the above particulars, or that he is without fixed residence, occupation, employment, or means of subsistence, thereupon the said magistrate may condemn him as a vagrant.

Apprehension of vagrant immigrant.

XLVIII. Any immigrant found in a district where he has no residence, or in any house or premises, and being unable to give a satisfactory reason for his being in such district, house, or premises, as the case may be, may be arrested by any officer or constable of police, without warrant, and brought before the stipendiary magistrate of the district in which he shall have been found, who shall have power to forward him to the Immigration Depôt, to be there detained until enquiries shall have been made about him, and, according to the result of such enquiries, such immigrant shall either be discharged from the Depôt or be otherwise dealt with according to law.

Absence from work held to be unlawful absence.

XLIX. Any labourer who shall absent himself from his work without the leave of his employer, or any justifiable cause, shall be considered guilty of an unlawful absence, and liable to the punishments enacted against unlawful absences in Article 18 of Ordinance No. 16 of 1862.

Absence from work and from dwelling during 3 days held to be desertion.

L. Any labourer under written engagement who shall absent himself from his work without the leave of his employer, or any justifiable cause, and shall moreover abscond from his dwelling place, for a space of more than three consecutive days, shall be considered a deserter, and shall be liable to be apprehended and punished as such by imprisonment not exceeding three months.

Provided always, that any such desertion shall be deemed to have been condoned by the employer, if the latter shall have

allowed the labourer to resume work without previous prosecution for such offence.

The punishment imposed in and by Article 13 of Ordinance No. 4 of 1864 upon persons convicted of vagrancy shall not be applied to any deserter as defined in the present article, who shall be condemned as such upon the complaint of his employer.

Arrest of deserters by employer or his agents without warrant.

LI. If any labourer desert from his employer's service, it shall be lawful for such employer, or any servant of such employer acting with his authority and on his behalf, without a warrant and without the assistance of the police, to apprehend such labourer in any public place where he may be found; provided that if the party making the arrest in so doing use any unnecessary violence, or do not forthwith, after such arrest, hand over the labourer to a police officer or constable, together with a statement in writing, or to be taken down in writing by the police, mentioning the name and residence of the party making the arrest, and the charge upon which the labourer has been arrested, or do not appear and support the charge before the stipendiary magistrate having jurisdiction to entertain the same, such party shall be liable to a fine not exceeding 10*l.*, or to imprisonment not exceeding one month.

Arrest of deserters by police without warrant, at instance of employer.

LII. Any officer or constable of police may, at the instance of any employer, or of any person acting with the authority or on behalf of the employer, and upon being furnished with a statement containing the particulars specified in the preceding article, arrest any labourer charged under such statement with desertion, without warrant, in any public place where such labourer may be found; provided that such labourer, upon being so arrested, be forthwith taken before the nearest stipendiary magistrate, to be dealt with according to law.

If the party at whose instance such labourer shall have been arrested do not, after due notice of the arrest and of the time and place of hearing, appear and support the charge before the stipendiary magistrate having jurisdiction to entertain the same, such party shall be liable to the penalties enacted in the preceding article.

Penalty for wrongful arrest of labourer.

LIII. If any labourer be wrongfully apprehended, the person apprehending him, or on whose charge or by whose order he shall have been so apprehended, and all persons who shall have aided or abetted the apprehender in effecting the apprehension, shall be liable to a fine not exceeding 10*l.*, a part of which may be paid to the labourer so apprehended, as damages, or to an imprisonment not exceeding one month. But any officer or constable of police shall be deemed to have been justified in arresting or detaining a labourer upon a charge of desertion, if he shall have acted *bonâ fide* in conformity with the provisions of either of the two preceding articles.

Imprisonment not to interfere with contract.

LIV. No imprisonment undergone by a labourer for any offence committed by him before the expiration of his contract of service shall release him from such contract; nor shall the time of his

imprisonment be reckoned as part of the term of service under his contract, except in case of imprisonment for unlawful absence under the provisions of Art. 18 of Ordinance No. 16 of 1862.

Police may enter premises in search of vagrant immigrants.

LV. Any officer or constable of police, or any other person authorized by the Governor, may, at any time of the day, or at any time of the night, under warrant of a stipendiary or district magistrate, enter any premises wherein any immigrant is employed or resides, and may ascertain whether such immigrant is a new immigrant under contract of service, or an old immigrant having a ticket and pass in due form as prescribed under the provisions of this Ordinance; and, in case of such person not being satisfied with regard to the status of such immigrant, he may apprehend him and take him before the stipendiary magistrate of the district, to be dealt with according to law.

Ticket of servant to be produced to magistrate or police by master.

LVI. Any magistrate or officer of police shall be entitled to demand production of the ticket and contract of service of any immigrant who may be working for any employer, and any person who, having such contract or ticket in his possession, shall refuse to produce the same when so required as aforesaid, shall be liable to a fine not exceeding 10*l.*

Illegal issue of passes, &c.

LVII. Any person not vested with any legal authority to issue passes or permits, who shall give a pass or permit to any labourer not lawfully in his service, shall be liable to a fine not exceeding 5*l.*, or to imprisonment with hard labour not exceeding one month, without prejudice to the penalties prescribed by law against unlawfully harbouring or employing deserters.

Any labourer using any such unlawful pass or permit as aforesaid shall be liable to imprisonment not exceeding one month.

Falsification of tickets, &c.

LVIII. Any person falsifying or altering an immigrant's ticket, pass, or certificate, or any endorsement thereon, and any immigrant using a falsified or altered immigrant's ticket, pass, or certificate, or any genuine immigrant's ticket, pass, or certificate bearing a falsified or altered endorsement, shall be liable to imprisonment with hard labour for a period not exceeding three months, to be awarded by the stipendiary magistrate, without prejudice to an action for forgery, if cause exist. In which latter case, the stipendiary magistrate may commit the offender to prison, in order that the Procureur General, to whom he shall forthwith report the circumstances of the case, may, if he think fit, enter proceedings against the said offender for such forgery.

Immigrants without employment to be received into Depôt.

LIX. The Protector of Immigrants shall make arrangements for receiving into the Depôt, or such other place as the Governor may appoint in that behalf, all immigrants who cannot find employment, and shall endeavour to provide them therewith.

Their admission and stay there shall be under Regulations, with a view to the prevention of abuses.

Immigrant absconding from Depôt, liable to imprisonment.

LX. Any immigrant leaving the Depôt or other place aforesaid after he has become amenable to its Regulations, without the sanction of the Protector, shall, on proof thereof to the satisfaction of the stipendiary magistrate, be liable to imprisonment with hard labour for any period not exceeding 15 days.

LXI. Every immigrant intending to leave the Colony shall be bound to present himself before the Protector of Immigrants, and to prove that he has completed his industrial residence. And if such immigrant be about to depart in any ship other than a ship chartered by Government for the conveyance to India of return immigrants, such immigrant shall be bound before embarking to obtain a passport from the Protector. Departure of immigrants from the Colony.

Any master of a ship who shall allow any immigrant to embark on board his ship without having obtained such passport as aforesaid shall be liable to a fine not exceeding 20*l.* ; and the immigrant so embarking may be taken out of the ship by any officer of the Port Department, or by any officer or constable of police, and handed over to the Protector of Immigrants.

LXII. It shall be lawful for the Governor, on sufficient presumption arising from police reports or judicial proceedings that any Indian immigrant is a confirmed vagrant, or is a member of any association or combination for criminal purposes, or has been implicated in any criminal acts, to send him back to India; and, in case of his returning to this Colony, to cause him to be apprehended and detained until he be again sent out of the Colony. Governor authorized to send immigrants back to India in certain cases.

LXIII. A penalty not exceeding 5*l.* shall be incurred by any employer who shall fail, within 48 hours after the death, upon his premises, of any immigrant labourer in his service, to comply with the requirements of the 29th Article of the Ordinance No. 13 of 1857, intituled "An Ordinance for amending the Law "on the Curatorship of Vacant Estates," relative to the estate and effects of such deceased labourer. Declaration by master, of property of deceased immigrants.

Provided that if the declaration of decease of such immigrant be made to the officer of the Civil Status by a person other than the employer, the latter shall be bound to comply with such requirements in like manner as if the said declaration of decease had in fact been made by him.

LXIV. The provisions of Ordinance No. 7 of 1865, intituled "An Ordinance to secure the rights of New Immigrants under "contracts of service with Job Contractors, and to extend the "jurisdiction of Stipendiary Magistrates to claims for wages "founded on guarantee," shall henceforth apply to contracts of service between any job contractor and any Indian immigrant. Security for wages of immigrants engaged to job contractors.

LXV. A penalty not exceeding 20*l.* and not less than 5*l.* shall be incurred by— Penalty for false statement as to number of men on estate.

1st. Any person who, in any notification as provided in Article 12 of Ordinance No. 29 of 1865, shall knowingly state the number of servants for whom he has engaged a medical practitioner at a smaller number than that of all the servants employed and residing at the place referred to in the said notification.

2nd. Any medical practitioner who shall grant any certificate as in Schedule B. to the said Ordinance, knowing that the number of labourers stated in the notification preceding, and referred to in such certificate, is smaller than the whole number of labourers employed and residing at the place specified in the said notification.

Protector to be guardian to Indian orphans and lunatics.

LXVI. The Protector of Immigrants is hereby appointed to act as guardian *ex officio* to all orphans of Indian extraction, whether born in this Colony or elsewhere, who have no relatives in the Colony competent to form a family council for them in conformity with the requirements of the Civil Code. He is also hereby empowered to act as guardian *ex officio* to all Indian lunatics who have no relatives in the Colony by law qualified to elect a guardian and sub-guardian for them. In all such cases the Protector shall have full power to perform of his own authority, as guardian of the minor or lunatic, as the case may be, any such acts as, under the Civil Code of this Colony, can only be performed with the approval of a family council duly homologated.

Penalty for not obeying summons to Stipendiary Court.

LXVII. Any person who, having been duly served with any summons issued by a stipendiary magistrate, shall refuse or neglect, without sufficient cause, to appear or to produce any books, papers, or writings required by such summons to be produced, and also every person present in court who, on being required to give evidence, shall refuse to be sworn or to give evidence, shall forfeit and pay a fine not exceeding 10*l.* sterling.

Penalties for insulting magistrate or any officer of the court.

LXVIII. If any person shall wilfully insult a stipendiary magistrate, or any clerk or officer of the court, during his sitting or attendance in court, or in going to or returning from the court, or shall wilfully interrupt the proceedings of the court, or otherwise misbehave in court, it shall be lawful for any officer of the court, with or without the assistance of any other person, by the order of the magistrate, to take such offender into custody, and detain him till the rising of the court, and the magistrate shall be empowered, if he shall think fit, by a warrant under his hand, to commit any such offender for a time not exceeding seven days, or to impose upon such offender a fine not exceeding 5*l.*, for any such offence, and in default of payment thereof to commit the offender for any time not exceeding seven days, unless the said fine be sooner paid.

Penalty for insulting officer or rescuing goods taken in execution.

LXIX. If any officer of a Stipendiary Court shall be assaulted while in the execution of his duty, or if any rescue shall be made or attempted to be made of any goods levied under process of the court, the person so offending shall be liable to a fine not exceeding 20*l.*, to be recovered by the order of the court, and it shall be lawful for any peace officer, in any such case, to take the offender into custody (with or without warrant), and bring him before such court accordingly.

Service of process by ushers.

LXX. Any process issuing out of a Stipendiary Court may, when the stipendiary magistrate shall so specially order, be served or executed by the District Court usher of the district, who shall thereupon receive fees to be taxed by the stipendiary magistrate in accordance with the tariff of the District Court in such matters.

Penalties to be enforced by seizure and imprisonment.

LXXI. All penalties which shall be imposed, and all costs and damages which shall be awarded, by any stipendiary magistrate, may be recovered by seizure and sale of the goods of the person against whom they shall be imposed or awarded, or of so much of the said goods as may be requisite for such recovery; and, failing

sufficient distress, the party may be condemned to imprisonment at the following rate, viz. :

When the fine or costs, or both, amount to 5*l.* or less, for a number of days equal to the number of shillings due by him. Such imprisonment, however, shall never exceed 30 days.

Where more than 5*l.*, to any time not exceeding 60 days.

Delays of appeal.

LXXII. The delay of appeal from any judgment or order of a stipendiary magistrate or of a Court of Petty Sessions is from henceforth limited to five days from the date of the judgment or order appealed from, instead of the delay of 10 days as fixed by Article 19 of Ordinance No. 15 of 1852.

In any case other than between master and servant, a party condemned to the payment of any sum exceeding 10*l.*, or to imprisonment exceeding one month, may appeal from such condemnation.

Forms of bonds, tickets, &c. may be altered.

LXXIII. Any forms of bonds, engagements, tickets, or passes prescribed by any law relating to immigrants or labourers, may from time to time be altered by Regulations to be passed as hereinafter mentioned.

Governor may empower clerks to pass contracts, &c.

LXXIV. It shall be lawful for the Governor to authorize any clerk or officer attached to the Stipendiary Court to perform all acts necessary for the passing of contracts of engagement and discharges of labourers, in lieu and stead of the stipendiary magistrate of such court, subject to such Regulations as may be from time to time in that behalf made by the Governor in Executive Council, and published in the Government Gazette.

All contracts of engagement and discharges, passed or issued by any clerk or officer so authorized as above, shall be as valid and effectual, to all intents and purposes, as if passed or issued by the stipendiary magistrate.

Regulations.

LXXV. The Governor in Executive Council shall have power to make Regulations, and from time to time to add to, alter, or revoke the same, for the purpose of carrying out the provisions of this Ordinance and of any other laws in force at the time being relative to immigration, or to masters and servants, and for establishing a tariff of fees leviable on proceedings to be had before the Stipendiary Courts, and on the delivery of tickets or other documents by the Protector of Immigrants and by stipendiary magistrates : which Regulations may provide that any person contravening any article thereof shall be liable in such penalty, not exceeding 10*l.* sterling, as in such Regulations shall be provided for such contravention.

All such Regulations, on being published in the Government Gazette, shall be as valid and effectual as if they had been contained verbatim herein.

A table of such fees shall be put up in some conspicuous place in the Court House, and in the Clerk's Office.

The fees on every proceeding shall (unless otherwise provided by the Regulations aforesaid) be paid in the first instance by the complainant or party instituting the proceedings.

Provided that in any case of a complaint made by a labourer against his employer, it shall be in the discretion of the stipendiary magistrate before whom such complaint is made, to dispense the labourer from payment of such fees.

Complaints to be tried by stipendiary magistrates.

LXXVI. All complaints for contraventions of Ordinance No. 29 of 1865 and of this Ordinance may be made to and adjudicated on by the stipendiary magistrate of the district in which the servants reside to which the said complaints refer.

Recovery of penalties.

LXXVII. All penalties provided by this Ordinance or by any Regulations which shall be made in virtue thereof, shall be sued for and be recoverable before a stipendiary magistrate.

Repeal of former laws.

LXXVIII. The following Laws and parts of Laws, viz. :

Ordinance No. 2 of 1845.
„ „ 5 „ 1849.
„ „ 7 „ 1849.
„ „ 6 „ 1850.
„ „ 16 „ 1852.
„ „ 15 „ 1854.
„ „ 21 „ 1854.
„ „ 12 „ 1855.
„ „ 22 „ 1857.
„ „ 30 „ 1858.
„ „ 2 „ 1859.
„ „ 18 „ 1864.

Article 14 of Ordinance No. 16 of 1862,
And Article 26 of Ordinance No. 29 of 1865,
are hereby repealed, but reserving the operation of the said Laws in so far as they regard any right or interest which shall have been acquired under the same prior to this Ordinance coming into operation.

LXXIX. This Ordinance shall come into operation on a day to be fixed by proclamation.

Passed in Council, at Port Louis, Island of Mauritius, this twenty-ninth day of November, One thousand eight hundred and sixty-seven.

JOHN DOUGLAS,
Secretary to the Council
of Government.

Published by Order of His Excellency the Governor.
FELIX BEDINGFELD,
Colonial Secretary.

SCHEDULE.

Old Immigrant's Ticket.

Name of Immigrant.....
Number .....
Name of Father.....
Name of Mother .....
Age (in letters) .....
Stature (in feet and inches) ...
Caste .....

Portrait.

Mark .....
Native Country .....
Number of Vessel by which introduced .....

This Immigrant is free to engage himself.

Delivered this 186 .

Signed :

Protector of Immigrants.

Appendix No. 33.

Mauritius.

Regulations for Ordinance No. 31 of 1867.

Requisition to be made in triplicate.

I. Every requisition under Article 1 of Ordinance No. 16. of 1862 shall be made in triplicate. One copy thereof shall be retained by the Protector of Immigrants; another, signed or initialed by him, and bearing the date of its registration, shall be returned by him to the Requisitionist; and the third shall be forwarded by the Protector of Immigrants to the Emigration Agent for Mauritius at the port of India whence the Immigrants are required.

Cancellation of requisition.

II. Any requisition may be cancelled, by the Requisitionist's subscribing in the Immigration Office a withdrawal, in the form of the Schedule A. hereunto annexed; but such withdrawal shall only take effect one month after it shall have reached the Emigration Agent to whom the requisition has been forwarded.

Minimum rates of wages and allowances.

III. When any requisition shall specify the Wages and Allowances which the Requisitionist undertakes to give, the said Wages shall not be less than eight shillings sterling per calendar month for each Immigrant above 18 years of age; and the said Allowances shall not be less than the following:—

Rice, one pound and a half, or two pounds of pounded maize, or two pounds and a half of cooked manioc, or five pounds of raw manioc - - - - -	per diem.
Dholl, half a pound - - - -	„ week.
Salt fish, half a pound - - -	„ „
Ghee or Oil, four ounces - - -	„ „
Salt, four ounces - - - -	„ „

Government scale of wages and allowances.

IV. For all cases in which no wages and allowances shall be stipulated in the requisition, or in which Requisitionists will leave it to Government to stipulate on their behalf the wages and allowances to be proposed to intending Emigrants in India, a Government Scale of Wages and Allowances shall be framed and published, and shall be communicated to the Emigration Agents of the Colony for their guidance.

Scale liable to be altered.

V. Such Government Scale shall be liable to be altered from time to time as the Governor may deem proper as regards any future contracts.

Contract to be fully explained in India.

VI. The Emigration Agent shall carefully explain to each intending Emigrant the terms and conditions of the engagement proposed to him, and shall not allow any contract to be executed by intended Emigrants unless he be satisfied that the conditions thereof are fully understood by each of them.

Stipulation to be made in contract when advances of wages are paid in India.

VII. In all cases in which advances of wages shall be demanded in India by Emigrants before their embarkation, such advances shall not exceed the amount of one month's wages, and shall only

e made to them on their consenting to the insertion of the ollowing clause into their contract of service :—

"We acknowledge having received the advances of wages orne opposite to our respective names, and agree to deductions eing made from our wages in Mauritius, to the extent of one ourth of the rates at which we respectively engage to serve, ntil the full amount of such advances shall have been recovered y our Employers."

Despatch of emigrants from India.

VIII. The Emigration Agent shall, as soon as practicable after he execution of each contract, despatch the Emigrants engaged herein to the Protector of Immigrants in Mauritius, forwarding vith them their contract in duplicate, their passes, and the other apers and documents required by law to be despatched with nem.

Proportion of females.

IX. He shall also despatch with every gang of male emigrants he number of females required by the rules in force at the me.

Announcement of arrival of Immigrants.

X. The arrival at Port Louis of any Immigrants engaged in ndia under requisitions forwarded as here-above mentioned, nd the day on which such Immigrants may leave the Immigration Depôt, shall be announced by the Protector of Immigrants, as oon as possible after their arrival, in one or more of the Colonial ewspapers.

Payment of costs of introduction, and delivery of Immigrants.

XI. An acquittance in the form of the Schedule B. hereto nnexed shall be delivered by the Protector on his receiving from ny Requisitionist the cost of the introduction of any Immigrants nported for him. In such case the Immigrants introduced for ne Requisitionist shall also be immediately delivered to him, vith a duplicate or copy of their contract, and the tickets belonging o them.

Certificate of engagement to be delivered to each Immigrant.

XII. Before such Immigrants leave the Immigration Depôt Certificate of Engagement in the form of the Schedule C. shall be delivered to each of them by the Protector of mmigrants.

Allotments.

XIII. A certificate of allotment in the terms of the Schedule D. hereto annexed shall be delivered by the Protector of mmigrants to each Employer to whom an allotment of Immigrants hall be made in conformity with Article 2 of Ordinance No. 31 f 1867. Such Certificate shall operate as a binding obligation n the Employers and Immigrants therein mentioned to enter into Contract of Service in the terms therein specified.

Engagement of allotted Immigrants.

XIV. Every such certificate shall be full authority to the tipendiary Magistrate having jurisdiction in the premises, to nake out and execute a formal written contract of service in the erms of the Schedule E. hereunto appended ; and in so doing he nall not enquire whether the Immigrant and Employer consent o such contract, nor shall it be necessary for these parties to ttend before him for the purpose of executing the same.

Engagement of labourers who are not allotted Immigrants.

XV. All Contracts of service passed before any Stipendiary Magistrate with labourers who are not allotted Immigrants, nall be in the form of the Schedule F. hereto annexed.

Release of new Immigrant from industrial residence on his arrival.

XVI. If any Requisitionist desire to release any new Immigrant on his arrival from the contract passed between them, such Requisitionist shall either personally, or by his written authority given to another person, appear before the Protector of Immigrants, who shall thereupon explain to the Immigrant the effect of such release; and if the Immigrant agree thereto, the Protector shall cause both parties to sign in his presence a memorandum in the form of the Schedule G. hereto annexed ;—and the Immigrant so released shall thereupon be entitled to receive an Old Immigrant's ticket before leaving the Depôt.

Release of a new Immigrant from any residue of industrial residence.

XVII. If an Employer desire to release any new Immigrant from any residue of Industrial Residence, under the provisions of Article 17 of Ordinance No. 31 of 1867, such release shall be confirmed by the Stipendiary Magistrate of their District on both parties expressing their consent thereto in his presence ; and a memorandum of such release in form of the Schedule H. hereto annexed, signed by both parties and certified by the Magistrate, shall be delivered to the Immigrant, who, on production thereof to the Protector of Immigrants, shall be entitled to receive an Old Immigrant's ticket.

Transfer of a contract of a new Immigrant on his arrival.

XVIII. If a new Immigrant, on his arrival, consent to have his contract transferred by his Introducer to another Employer, the Protector of Immigrants, on all parties to the transfer expressing their consent thereto in his presence, shall make them sign a transfer in the form of the Schedule I. hereto appended, and his confirmation thereof shall be inscribed upon the contract, and shall be briefly endorsed upon the ticket of the Immigrant.

If the transfer do not include all the Immigrants who are parties to the contract, a copy of the contract, bearing only the names of the Immigrants who consent to the transfer, shall be drawn up, and delivered to the substituted Employer, with the Protector's confirmation of its transfer inscribed upon it.

Transfers of contracts under Article 10 of Ordinance No. 16 of 1862.

XIX. If any contract be transferred under the provisions of Article 10 of Ordinance No. 16 of 1862, a certificate in the form of the Schedule J. in the Appendix hereto annexed shall be endorsed upon it.

Redemption money by whom receivable.

XX. When any new Immigrant shall be entitled under Ordinance No. 31 of 1867 to redeem the remainder of his industrial residence, the redemption money which he shall have to pay shall be received by the Chief Clerk of the Senior Stipendiary Magistrate's Office if it be in Port Louis, or by the District Cashier if it be in a rural district; and an acquittance in the form of the Schedule K. hereto annexed shall thereupon be delivered to such Immigrant, upon presentation of which in the Immigration Office he shall be entitled to receive an Old Immigrant's ticket.

Stamp duty by whom receivable.

XXI. The stamp duty chargeable on contracts of new Immigrants shall be received by the Chief Clerk of the Senior Stipendiary Magistrate in Port Louis, and by the District Cashier in each of the rural districts.

XXII. In all cases in which stamp duty or redemption money shall be chargeable on the engagement of a new Immigrant, discharged from a previous contract, the Stipendiary Magistrate before whom he shall be discharged shall distinctly endorse upon the Immigrant's ticket the amount chargeable on the said Immigrant's subsequent engagement, and the name and residence of the party to whom such stamp duty or redemption money shall be due. Stamp duty or redemption money due to be endorsed upon ticket.

XXIII. In every case in which the right to stamp duty or redemption money shall be forfeited under Article 15 of Ordinance No. 31 of 1867, the Magistrate shall enter upon the Ticket of the Immigrant the following endorsement: Forfeiture of stamp duty or redemption money.

"The stamp duty or redemption money chargeable on the future engagements of this Immigrant shall be due to Government."

XXIV. The stamp duty or redemption money received by the Chief Clerk of the Senior Stipendiary Magistrate, or by any District Cashier, shall in each case be paid out by him on demand to the party entitled to claim and receive it, or to any other party in his right, on proof being shown to the Stipendiary Magistrate of the District of the claimant's right to receive such money. Stamp duty and redemption money payable on demand to parties entitled thereto.

XXV. The Chief Clerk of the Senior Stipendiary Magistrate's Office, and the District Cashiers in the rural districts, shall, within the first week of each month, publish in the Government Gazette a return of all sums so received by them and still remaining unclaimed in their hands, stating the names and residences of the parties on whose behalf such sums have been recovered; and a printed copy of every such return shall be conspicuously posted up in each of the Stipendiary Magistrates' Offices, and in the Immigration Office. Return of unclaimed stamp duty and redemption money to be published monthly, and posted up.

XXVI. All such sums, if they remain unclaimed during three months, shall be paid into the Public Treasury. Payment of stamp duty and redemption money into Treasury.

XXVII. The Treasurer shall have power to refund every sum so transferred to the Public Treasury; but not otherwise than on a certificate signed by the Stipendiary Magistrate of the District whence the amount shall have been transferred, setting forth that the claimant is entitled to receive the said money. Refund from Treasury when rightfully claimed.

XXVIII. Accounts shall be kept by the Chief Clerk of the Senior Stipendiary Magistrate's Office and by the District Cashiers in the rural districts, of all such sums received, whether as stamp duty or as redemption money; of all reimbursements thereof made by them; and of all remittances thereof made to the Public Treasury; and, in case of each reimbursement, the signature of the recipient of the money refunded, and that of the Stipendiary Magistrate, shall be taken on the Registers of such accounts. Accounts of stamp duty and redemption monies.

XXIX. If any new Immigrant discharged from a contract of service does not redeem the remainder of his industrial residence, or re-engage himself, within eight days from the date of his certificate of discharge, he shall be liable to be sent to the Protector of Immigrants, who shall endeavour to procure New Immigrant not engaging himself nor redeeming his industrial residence after discharge from a contract.

employment for him. If any such Immigrant refuse to take any employment which may be offered to him on terms approved by the Protector of Immigrants, such Immigrant shall become liable to be sent to any work-house which may hereafter be established, and shall be subject to the regulations in force in such work-house during his stay therein.

Re-registered Immigrants engaged and discovered to be under previous contracts.

XXX. If an Immigrant re-registered under Articles 15 and 16 of Ordinance No. 16 of 1862 and thereafter engaged, be discovered to be under a previous contract and such contract be enforced, the whole or a part (as the case may be) of the stamp-duty received from the last employer shall be refunded to him on his applying to the Protector of Immigrants; the amount of every such repayment shall be proportional to the time of service remaining to be performed under the Immigrant's last Contract.

Proofs of industrial residence exhibited after re-registration.

XXXI. If after his re-registration as aforesaid an Immigrant shows proof of his having previously gone through the whole or a part of his industrial residence, his ticket shall be altered accordingly by the Protector of Immigrants, and mention of such alteration shall be made against the Immigrant's registration in the Immigration Office.

Withdrawal and cancellation of certificate of discharge on the re-engagement of a labourer.

XXXII. On re-engaging any labourer discharged from a previous contract the Stipendiary Magistrate shall withdraw from him his certificate of discharge, and cancel it; except in cases where the certificate mentions that the wages of the labourer have not been wholly paid to him, in which cases the new engagement shall be inscribed upon the certificate of discharge, and the certificate returned to the labourer.

Judgment for wages due after discharge.

XXXIII. In every case in which a judgment shall be given in favour of a labourer, under Article 36 of Ordinance No. 31 of 1867, on account of wages stated to be due to him on his certificate of discharge, a summary mention of such judgment, stating the day on which the delay granted for its execution shall expire, shall be inscribed upon the certificate, and shall be authenticated by the signature of the magistrate. The delay so granted shall be well explained to the labourer, and notice thereof shall be served upon the employer, at his expense, if he be not present.

Judgment to be executed at expiration of delay, unless stayed by judgment creditor.

XXXIV. At the expiration of such delay, if the judgment be not satisfied, proceedings shall be taken for the execution thereof, unless at the instance of the labourer a fresh delay be granted; in which case execution shall be deferred till the expiration of such new delay.

Issue of police pass on first declaration or new declaration.

XXXV. Every old Immigrant who declares his abode and occupation at a central police station under Article 43 of Ordinance 31 of 1867, and every Old Immigrant who makes a new declaration under Article 44 of the said Ordinance, shall receive a police pass in the form of the Schedule L. hereto annexed, free of charge. Such pass shall be signed by the Inspector of Police, or by the district Serjeant-Major of Police, or by any non-commissioned Officer of Police authorized so to do;—and its issue, in the case of a removal from one District to another, shall be subject to the provisions of Regulation 36.

XXXVI. If any Immigrant to whom a Police Pass shall have been issued under the provisions of the last preceding regulation wish to reside in another District he shall first give notice of such ntended change of abode to the Inspector of Police of the District vhich he intends to leave; and such Police Inspector, or other Officer duly authorized to act in his stead, shall forthwith enter in acknowledgment of such notice on the Immigrant's pass and on the counterpart of such pass. No new pass shall be issued o any Immigrant who has removed from one District to another unless such notice has been previously given by him. New pass in case of a removal from one district to another.

XXXVII. If any old Immigrant allege that he has lost a pass ssued to him at a Central Police station as here-above mentioned, nd there be no reason to presume that his statement is untrue, duplicate of such pass shall be issued to him, on his paying the ee mentioned in the tariff hereto annexed. Duplicate of police pass.

XXXVIII. All Immigrants admitted under the provisions of Ordinance No. 31 of 1867 into the Immigration Depôt, or any Branch Depôt that may be appointed by the Governor for their eception, shall be dieted during their stay therein according to uch dietary rules as may be approved by the Governor, and hall besides receive such medical care as they may require. Immigrants placed under the charge of the Protector.

XXXIX. All such Immigrants, pending the inquiries which hall be made about them, shall be detained in the Immigration Depôt, or such other Depôt as aforesaid, and they shall be bound, luring their stay in such Depôt, to perform such work as shall e allotted to them under the directions of the Protector of mmigrants, unless they be deemed unfit for such work by the Medical Officer appointed to attend them. Stay in Depôt pending inquiries.

XL. If any such Immigrant, either on his reception in any uch Depôt or subsequently, be recognized to be a Pauper according o the definition of that term in the laws which provide for the elief of the Poor, he shall be forthwith transferred to the charge f the Local Board of Guardians. Transfer of Paupers to Board of Guardians.

XLI. If it appear that any such Immigrant is a vagrant, accord- ng to the definition of that term in Article 46 of the last above- mentioned Ordinance, and if he refuse to take such employment s may be offered to him by the Protector, he shall be sent to the tipendiary Magistrate to be dealt with as a vagrant. Vagrants.

XLII. If proof be shown to the Protector that any Immigrant dmitted into any such Depôt is a Deserter, he shall be delivered ver to his Employer. Delivery of deserters to their employers.

XLIII. Any person who may wish to employ labourers shall ave free access to the inmates of any of the above-mentioned Depôts, provided he previously obtain a written permission from the Protector; and all Immigrants in any such depôt shall, at such imes as may be approved by the Protector, be allowed to proceed n search of employment, under a permit signed by any Officer uthorized to issue such permits. Rules of Depôt as to ingress and egress.

XLIV. Any Immigrant in one of the above-mentioned Depôts who, after identification, is not recognized to be either a vagrant or a Deserter, shall be free to leave such Depôt on accepting ny offer of permanent employment that may be made to him Discharge of Immigrants from Depôt.

through the Protector, or on satisfying the Protector that he is going to undertake, on his own account, a bonâ fide employment.

Cost of the maintenance of Immigrants in Depôt.

XLV. The cost of the maintenamce of Immigrants for the time of their stay in any such Depôt shall as far as practicable be recovered by the Protector from the persons who shall offer to employ them.

Wages received for labour of Depôt Immigrants.

XLVI. If wages be received for the labour of any Immigrant during his stay in any of the above-mentioned Depôts, the cost of his maintenance shall be deducted therefrom, and the balance, if any, shall be paid over to him.

Issue of Duplicate-tickets.

XLVII. The issue of Duplicate-tickets to Immigrants shall be subject to the following rules :

1°. If the applicant present his name and number and has not been declared as a deserter, a "*Permit to work*," in the form of the Schedule P. hereto annexed, may be issued to him, authorizing him to remain absent from the Depôt and take employment for any period not exceeding three months ; during which time it shall be notified in the Government Gazette that he has applied for a Duplicate-ticket ; and, at the end of such period, if he has not been claimed or denounced as a deserter, a Duplicate-ticket shall be issued to him, on payment of the fees mentioned in the tariff hereto appended.

2°. If the applicant do not present his name and number he shall either be detained in the Depôt till inquiries be made respecting him, or shall be sent with a Depôt-pass for such information as may be necessary for his identification ; after which, a *Permit to work* may be issued to him as above mentioned ; and, on the expiration of the period therein fixed, if he be not claimed as a deserter, a Duplicate-ticket may be given to him, on payment of the fees thereupon due under the tariff hereto appended.

Passports.

XLVIII. The passports deliverable under Article 61 of Ordinance No. 31 of 1867 shall be in the form of the Schedule N. hereto annexed, and shall be liable to the fee mentioned in the tariff appended to these regulations.

Embarking without a passport.

XLIX. Any Immigrant who, with intent to leave the Colony, shall proceed on board of any ship or vessel without having obtained the passport mentioned here above, shall be liable to a fine not exceeding 3*l*.

Detention of Immigrants prior to their deportation for misconduct.

L. Any Immigrant liable to be embarked under Article 62 of the aforesaid Ordinance shall be detained until his embarkation at the Central Police station or such other place as the Governor may direct.

Intestate estates of Immigrants.

LI. At the commencement of every month the Curator of Vacant Estates shall forward to the Protector of Immigrants a detailed list of all the Vacant Estates taken possession of under Article 29 of Ordinance No. 13 of 1857 ; the list shall set forth, as correctly as possible, the name and Immigration number of the deceased Immigrant labourer to whom the property belonged,

he place of his death, his age at the time of his death, and a precise description of the property taken charge of by the Curator. Every such list shall be translated into the Indian dialects and conspicuously posted up in the Immigration Office ; and the cost of he translation and publication thereof shall be paid by the Treasurer out of the funds realized from such Estates.

Wages of labourers in service of job contractors.

LII. All wages guaranteed to Immigrants under Article 64 of Ordinance No. 31 of 1867 shall be paid to such Immigrants in presence of the proprietor or lessee by whom such wages shall have been guaranteed, or in presence of some person authorized to represent the said proprietor or lessee ; and such proprietor or lessee, or his representative, shall sign the Pay-book on which such wages shall be borne, in attestation of his having witnessed he payment thereof ; in default of which the payment of such wages shall not be recognized by the Stipendiary Magistrate, and he proprietor or lessee shall not be held discharged from his guarantee in respect of such wages.

Tariff of fees.

LIII. From the day on which these regulations shall take effect the fees mentioned in the tariff hereunto annexed (Schedule O.) shall be charged and received by the officers herein designated, on the various documents and proceedings herein specified ; which tariff shall be liable to be altered as the Governor in Executive Council may deem fit to direct.

Exemptions by Protector.

LIV. It shall be lawful for the Protector to direct the delivery of any ticket, passport, or pass, free of charge, to infirm and destitute Immigrants ; and when the loss of any ticket or pass shall be satisfactorily explained to him, to exempt the applicant for a duplicate of such ticket or pass from the payment of the fee thereupon fixed by the tariff. In every such case an Exemption-Order in the form of the Schedule P. hereto annexed shall be delivered to the applicant, on presentation of which the ticket, passport, or pass therein mentioned shall be delivered to him. All such orders shall be numbered and filed by the officer whose duty it shall be to receive them.

Exemption from fee for portrait.

LV. The Protector shall have power to exempt any infirm or destitute Immigrant from the payment of the fee chargeable for his portrait.

Certificate of discharge issuable free of cost.

LVI. Any Stipendiary Magistrate shall have power to issue a certificate of discharge free of cost to any Immigrant who may be destitute or infirm. In every such case the Magistrate shall make mention of the exemption from payment in the register of discharges, and shall affix his initials to the entry made to that effect.

Exemption from payment for duplicate of Police Pass.

LVII. Any Stipendiary Magistrate to whom the loss of a Police Pass shall be satisfactorily explained shall have power to direct the issue of a duplicate thereof free of charge. In every such case an Exemption-Order in the form of the Schedule P. shall be given to the Immigrant claiming the duplicate, which Exemption-Order shall be filed at the police station whence the duplicate shall be issued.

Complaints receivable without prepayment of fees.

LVIII. On the institution of a complaint by a labourer no fees shall be charged for the issue of the consequent summonses or

warrants, if in the opinion of the Stipendiary Magistrate the Immigrant is unable to prepay such fees and yet appears to have a reasonable ground of complaint.

Reimbursement of fees.

LIX. In every case tried in a Stipendiary Court the party against whom judgment shall be given shall have to pay the cost of the process issued ; and in such case, if such cost has been prepaid by the complaint, it shall forthwith be refunded to him by the Clerk of the Court.

Official signatures to be taken as genuine unless proved to be false.

LX. Whenever any document requiring to have any official signature of any Magistrate or Public Officer under these regulations or under any other law relative to Immigration or to masters and servants, shall purport *ex facie* to have such signature, it shall be received in all Courts of Justice as genuine, without such signature requiring to be proved; and it shall continue to be so received until the said signature shall have been proved to be a forgery.

Previous regulations abrogated.

LXI. The regulations brought into effect by the Proclamations and Government Notices hereunder mentioned are hereby revoked and abrogated :—

1. Proclamation (under Ordinance 16 of 1852) dated 31st August 1854.
2. Government Notice No. 91, dated 26th August 1857.
3. Proclamation (under Ordinance 30 of 1858) dated 12th November 1858.
4. Proclamation (under Ordinances 12 of 1855, 22 of 1857, and 30 of 1858) dated 13th December 1860.
5. Government Notice No. 96 (under Ordinance 16 of 1852), dated 8th July 1862.
6. Government Notice No. 30 (under Ordinance 16 of 1852), dated 25th February 1864.
7. Government Notice No. 100 (under Ordinance 16 of 1862), dated 29th September 1864.
8. Government Notice No. 34 (under Ordinance 16 of 1862), dated 30th March 1865.
9. Government Notice (under Ordinance 16 of 1862) dated 15th February 1867.
10. Government Notice No. 57, dated 18th October 1867.
11. Government Notice No. 16 (under Ordinance No. 16 of 1862), dated 14th January 1868.

The present regulations shall take effect on and from the 25th day of May one thousand eight hundred and sixty-eight.

Passed at a meeting of the Executive Council held at Government House, Port Louis, on Thursday, the 14th day of May 1868.

THOS. ELLIOTT,
Acting Secretary to Executive Council.

A.

Withdrawal of Requisition.

request that steps be taken by the Protector
Immigrants to cancel the Requisition No. of 186 , signed
on the day of
st for Immigrants to be engaged for at .
Immigration Office, 186 .

Forwarded for the information and guidance of the Mauritius
migration Agent at .

Protector of Immigrants,
Mauritius.

B.

Acquittance for Costs of Introduction.

I hereby acknowledge having received from the
um of pounds shillings and pence
erling, being the full amount of the costs attending the introduction
Immigrants who have been this day delivered
ver to .
Immigration Office, 186 .

Protector of Immigrants.

C.

Certificate of Engagement.

I hereby certify that the under-mentioned newly-arrived Immigrant
as entered into a contract of service with M. of
Estate, in the District of for five
ears from this day of one thousand
ght hundred and sixty :—

Name _____
Father's Name _____
Number _____
Age _____

Protector of Immigrants.

D.

Certificate of Allotment.

I certify that I have this day allotted to the
nmigrants hereunder mentioned, to enter into a Contract with

for years, to be employed on the
Estate in the District of as , on
the wages mentioned opposite to their respective names, and on the
allowances of the Government Scale now in force.

Immigration Office, 186 .

Protector of Immigrants.

List of Immigrants allotted.

Name of Immigrant.	No.	Wages.			Name of Immigrant.	No.	Wages.		
		£	*s.*	*d.*			£	*s.*	*d.*

No.

E.

Contract of Service passed with allotted Immigrants.

For the Estate of
District of .

Be it remembered that on this day of
in the year of our Lord one thousand eight hundred and
of , Employer under this Contract of Service
having deposited in my hands a certificate of allotment of the Immigrants
under-mentioned, dated day of one
thousand eight hundred and , and signed by
Esquire, Protector of Immigrants, in terms of
Ordinance No. 16 of 1862, and relative regulations,—I
Esquire, a Stipendiary Magistrate of this Colony
of Mauritius, do hereby declare that the said Immigrants are engaged
to the said Employer in the capacity of for five years
commencing on this date, and terminating on the
day of one thousand eight hundred and .

The conditions of the said engagement are that the said Immigrant
shall be employed as .

And it is further agreed that the said shall
pay to the said Immigrants the wages mentioned opposite to their
respective names in the list hereto subjoined, and that such wages shall
be paid monthly.

And it is also agreed that the services of the said Immigrants shall be ırther remunerated by the delivery to them of the various articles ereunder specified, viz. :—

Rice,	pounds per diem.
Dholl,	pounds per week.
Salt Fish,	pounds per week.
Oil,	pounds per week.
Salt,	pounds per week.

Proper lodging and medical care shall be provided by the said to the said Immigrants.

And it is further agreed, that if the said ıall at any time employ the said Immigrants on any other Estate than ıat which is known by the name of ıd situate in the District of ccept with the consent of the said Immigrants given in the presence the Stipendiary Magistrate of the said District, then this present ntract of service shall *ipso facto* become null and void.

And it is further agreed, that if the above-mentioned Estate be sold, ienated, or transferred to another person, or succeeded to by another erson before the expiration of this present contract, the said Immigrants ıall serve such other person according to the terms of this contract, ıch new Employer being held bound towards the said Immigrants all the stipulations and obligations incumbent upon the Employer so placed by him.

The preceding agreement was signed by the above-named parties in y presence, the day and year above written, voluntarily, the same ing, as far as I am able to judge, fully understood by them spectively.

District of this day of ıe thousand eight hundred and sixty

Stipendiary Magistrate.

Name of Immigrant.	No.	Wages.			Name of Immigrant.	No.	Wages.		
		£	s.	d.			£	s.	d.

No.

F.

Contract of Service for the Estate of
in the District of

Be it remembered, that on this day of in the year of our Lord one thousand eight hundred and sixty , of and the Immigrants named on the list hereto subjoined, appeared before me, a Stipendiary Magistrate, and in my presence signed their names or marks to the following contract of service.

The said agree to hire the services of the said Immigrants, and the said Immigrants agree to render to the said their services in the capacity of for calendar months, commencing on the day of in the year one thousand eight hundred and sixty .

And it is further agreed that the said shall pay to the said Immigrants the wages mentioned opposite to their respective names in the list hereto subjoined, and that such wages shall be paid monthly.

And it is also agreed that the services of the said Immigrants shall be further remunerated by the delivery to them of the various articles hereunder specified, viz. :—

Rice,	pounds per diem.
Dholl,	pounds per week.
Salt Fish,	pounds per week.
Oil,	pounds per week.
Salt,	pounds per week.

Proper lodging and medical care shall be provided by the said to the said Immigrants.

And it is further agreed, that if the said shall at any time employ the said Immigrants on any other Estate than that which is known by the name of and situate in the District of except with the consent of the said Immigrants given in the presence of the Stipendiary Magistrate of the said District, then this present contract of service shall *ipso facto* become null and void.

And it is further agreed, that if the above-mentioned Estate be sold, alienated, or transferred to another person, or succeeded to by another person before the expiration of this present contract, the said Immigrants shall serve such other person according to the terms of this contract, such new Employer being held bound towards the said Immigrants in all the stipulations and obligations incumbent upon the Employer so replaced by him.

The preceding agreement was signed by the above-named parties in my presence the day and year above written, voluntarily, the same being, as far as I am able to judge, fully understood by them respectively.

District of this day of one thousand eight hundred and sixty .

Stipendiary Magistrate.

Name of Immigrant.	No.	Wages.			Name of Immigrant.	No.	Wages.		
		£	*s.*	*d.*			£	*s.*	*d.*

G.

Release of New Immigrant from Industrial Residence on his Arrival.

REGULATION XVI.

We being respectively the Employer and the Servant under a contract of service made at in India, and dated the day of , do hereby consent that the said second party shall from this day and henceforth be released from the said contract, and all obligations under the same.

The nature and effect of the above release explained by me to the said Immigrant, who having expressed his full consent hereto, both parties signed the same in my presence this day of one thousand eight hundred and sixty .

Protector of Immigrants.

H.

Release of a New Immigrant from a Residue of Industrial Residence.

REGULATION XVII.

We being respectively the Employer and the Servant under a contract of service made in the District of on the day of do hereby consent that the said second party shall from this day and henceforth be released from the said contract, and all further obligations in respect of his industrial residence.

The nature and effect of the above release explained by me to the said Immigrant, who having expressed his full consent thereto, both parties signed the same in my presence this day of one thousand eight hundred and sixty .

Stipendiary Magistrate for the District of .

I.

Transfer of a Special Contract.

I, and the under-named Immigrants, being respectively the intended Master and Servants under a contract of service made before the Government Emigration Agent at on the day of 186 , do hereby agree that the whole rights and obligations of the said first party under the said contract shall be and the same are hereby transferred, as at the date hereof, to who hereby agree to accept the said transfer, and all the rights and obligations accruing therefrom.

Name of Immigrant.	No.	Wages.			Name of Immigrant.	No.	Wages.		
		£	*s.*	*d.*			£	*s.*	*d.*

Employer mentioned in Contract.

Substituted Employer.

This transfer has been signed by all the parties thereto, in my presence, its nature and effect having been fully explained to them.
Immigration Office, this day of 186 .

Protector of Immigrants.

J.

Transfer of a Contract for the Residue of its Term.

I, and the under-named Immigrants, being respectively the intended Master and Servants under a contract of service made before in the District of on the day of 186 , do hereby agree that the whole rights and obligations of the said first party under the said contract from the date hereof shall be and the same are hereby transferred to who hereby agree to accept the said transfer, and all the rights and obligations accruing therefrom.

Name of Immigrant.	No.	Wages.			Name of Immigrant.	No.	Wages.		
		£	*s.*	*d.*			£	*s.*	*d.*

Employer mentioned in Contract.

Substituted Employer.

This transfer has been signed by all the parties thereto, in my presence, its nature and effect having been fully explained to them.
District of this day of 186 .

Stipendiary Magistrate.

K.

Received from No. the sum of
ounds shillings and pence sterling,
eing the full amount due by him as redemption money for the residue
f his industrial residence.
District of this day of 186 .

L.

PLAINES WILHEMS.

District No._____

Name_____

Immigration No._____

Ordinary Residence_____

Trade_____

Date

| | |

Inspector of Police.

LAST PASS.

District

No.

Date

PLAINES WILHEMS.

District No._____

Name_____

Immigration No._____

Ordinary Residence_____

Trade_____

Date

| | |

Inspector of Police.

LAST PASS.

District

No.

Date

M.

Permit to work.

The Immigrant No. who is an applicant for a Duplicate Ticket, is hereby authorized to remain absent from the Depôt and take employment until the 186 , during which time his name shall be published in the Government Gazette, in conformity with Regulation No. 47, under Ordinance No. 31 of 1867.

Immigration Office, 186 .

Protector of Immigrants.

N.

PASSPORT.

Under Article 41 *of Ordinance No.* 31 *of* 1867.

The hereunder-mentioned Immigrant having industrial residence and being free from engagement hereby permitted to proceed to per ship.

Immigration Office, Mauritius, 186 .

Protector of Immigrants.

Name.	Father's Name.	No.	Name.	Father's Name.	No.

O.

TABLE OF FEES TO BE LEVIED UNDER ORDINANCE No. 31 of 1867.

1.—*Fees to be paid in the Immigration Office.*

		£	*s.*	*d.*
1.	For every duplicate of a ticket - - -	1	0	0
2.	„ „ pass or duplicate pass issued by the Protector	0	5	0
3.	„ „ portrait of an Immigrant under Article 39 -	0	4	0
4.	„ „ passport under Article 61 - - -	0	2	0
5.	„ „ certificate of engagement - - -	0	1	0
6.	„ „ certificate of marriage - - -	0	2	0
7.	„ „ transfer of contract - - - -	0	2	0
8.	„ „ release from industrial residence - -	0	1	0

2.—*Fees to be paid to the Chief Clerk of the Senior Stipendiary Magistrate's Court in Port Louis, and to the District Cashiers in the Country Districts.*

		£	s.	d.
9.	For every contract with one or more old Immigrants -	0	2	0
10.	„ „ certificate of engagement - - -	0	1	0
11.	„ „ certificate of discharge - - -	0	0	6
12.	„ „ release from industrial residence - -	0	1	0
13.	„ „ transfer of contract - - -	0	2	0
14.	„ „ summons to party charged - - -	0	2	0
15.	„ „ summons to witness - - -	0	1	0
16.	„ „ warrant of any description - - -	0	2	0
17.	„ „ written order of any description - -	0	1	0
18.	„ „ recognizance by party appealing - -	0	2	0
19.	„ „ security bond for a job contractor - -	1	0	0
20.	„ „ search in book or record - - -	0	0	6
21.	„ the guardianship of goods seized, the same fee as under Ordinance No. 34 of 1852.			

The fees numbered 1, 2, 3, 4, 6, 8, 11, and 19 to be paid by the party at whose request or for whom the document is prepared.
The fees numbered 5, 9, and 10 to be paid by Employer.
The fees numbered 7 and 13 to be paid by substituted Employer.
The fees numbered 14, 15, 16, and 17 to be prepaid by complainant, or party at whose request the process is issued.
The fee numbered 18 to be paid by appellant on his giving notice of appeal.
The fee numbered 20 to be paid by party at whose request the search is made.
The fee numbered 21 to be paid out of proceeds of sale, or by party at whose instance the seizure has been made.
The fees numbered 9 to 19 inclusive shall be recovered through stamps.

P.

Exemption Order.

The Immigrant No. - is hereby exempted from the payment of the fee chargeable under the tariff now in force for a .

(Date)

(Signature)

Appendix No. 34.

Trinidad.

An Ordinance (No. 10. of 1868) enacted by the Governor of Trinidad, with the advice and consent of the Legislative Council thereof:

With regard to Immigrants.

[L.S.] Arthur Gordon.

Whereas an Ordinance was passed in Council on the 1st day of March in the year one thousand eight hundred and sixty-five, intituled "An Ordinance with regard to Immigration;" and another Ordinance was passed in Council on the eighteenth day of July in the year one thousand eight hundred and sixty-six, intituled "An Ordinance for the Establishment of Hospitals for "Immigrants:" And whereas it is expedient to make other provisions with regard to Immigrants: Be it therefore enacted by His Excellency the Governor, with the advice and consent of the Legislative Council, as follows:

Substituted certificate may be issued where the original is lost, &c.

I. Whenever it shall be made to appear to the satisfaction of the agent general of Immigrants on the declaration in writing, under the hand of any Immigrant, that the certificate of industrial residence of such Immigrant has been destroyed, stolen, or lost, it shall be lawful for such agent general of Immigrants, if he shall see fit, but not otherwise, on payment by such Immigrant of the sum of two pounds one shilling and eightpence, to deliver to such Immigrant a certificate of industrial residence to be called a "substituted certificate" in lieu of the certificate so destroyed, stolen, or lost, which substituted certificate may be in the form in the schedule marked A. annexed to this Ordinance; and every such substituted certificate shall have the same effect as the original certificate in lieu whereof the same shall be granted.

False declaration.

II. If any such declaration, to be made for the purpose of obtaining a substituted certificate under this Ordinance, shall be wilfully false in any particular, the Immigrant making such declaration shall, on conviction thereof before any justice of the peace, be imprisoned with hard labour for such term, not exceeding three calendar months, as the convicting justice shall direct.

Immigrant convicted of unlawful absence from estate to be returned on expiration of imprisonment.

III. Where any indentured Immigrant shall be convicted before any stipendiary justice of the peace, under the clause marked XLVIII. of the said Ordinance of the first day of March one thousand eight hundred and sixty-five, such stipendiary justice shall make an order that such indentured Immigrant, on the expiration of the term of his imprisonment, be taken back by

some constable of police to the plantation in respect of which the services of such Immigrant shall be due, there to be given up to his employer, and such employer shall pay to the constable of police having the custody of such Immigrant such mileage money as shall be specified in such order, and such mileage money shall be allowed at the rate mentioned in the clause marked LXIII. of the said Ordinance of the 1st day of March aforesaid, and if not immediately paid may be recovered in a summary manner, on the information of the inspector or sub-inspector of police, before any stipendiary justice of the peace.

Penalty for not making Return of Immigrants admitted to hospital.

IV. Any employer who shall fail to make any return required by the clause marked XIII. of the said Ordinance of the eighteenth day of July one thousand eight hundred and sixty-six shall, on the complaint of the agent general, or the inspector of Immigrants, before any stipendiary justice of the peace, forfeit such sum not exceeding five pounds as to such justice shall seem fit.

This Ordinance and No. 8 of 1866 to be part of 3 of 1865.

V. This Ordinance and the said Ordinance of the 18th day of July one thousand eight hundred and sixty-six shall be read as if the same formed part of the same Ordinance of the first day of March one thousand eight hundred and sixty-five.

Passed in Council this first day of May in the year of our Lord one thousand eight hundred and sixty-eight.

R. Lechmere Guppy,
Clerk of the Council.

SCHEDULE A.

Substituted Certificate of Industrial Residence.

Whereas it has been made to appear to me, the undersigned agent general of Immigrants, by an Immigrant, on the declaration in writing under the hand of the said made before me, that the certificate of industrial residence granted to the said on the day of under the hand of was on the day of burnt and destroyed by a fire (*or other mode of destruction, as the case may be,*) which took place in the residence of in the ward of (*or otherwise, as the case may be,*) "[or stolen from the possession of the said " by (*name the person, if known, or if unknown*) by some person or persons unknown, or lost from the dwelling house of the said (*state situation of dwelling house*), or from the person of the said and that he is unable to find the same]. I therefore the said *H.M.* in pursuance of the powers vested in me do hereby certify that the said did complete his term of industrial residence in this island on the day of .

Given under my hand at Port of Spain this day of in the year 186 .

Appendix No. 35.

Grenada.

N Act (No. 390 of 1868) to provide for the payment of bounties to resident Indian Immigrants, and for prolonging their term of service. Dated 4th day of August 1868.

Whereas a great number of Indian Immigrants introduced to this colony have given notice of their intention to avail emselves of their right to back passages to India: And whereas is essential to the interests of the colony that their services ould be retained, and that bonuses for effecting such purpose ould be granted to those who may be willing to remain for an tended period of time: Be it therefore enacted by the Governor, ouncil, and Assembly of the Island of Grenada and its depen- ncies as follows: Act No. 230. Act No. 256. Preamble.

1. That it shall be lawful for the treasurer to pay, out of the nds raised for Immigration purposes under warrant from the overnor, to every Indian Immigrant at present resident in this lony willing to be re-indentured for a term of years, a bounty every able-bodied male adult Immigrant, and to every able- odied female adult Immigrant, who shall have completed spectively a ten years term of service, the sum of ten pounds erling, and to every other Immigrant under the age of fourteen ars, and not less than ten years, and who shall also have mpleted the aforesaid term of service, the sum of five pounds. Treasury to pay 10*l.* to Immigrant who has completed a term of 10 years service. 5*l.* to all Immigrants under the age of 14.

2. That any such Immigrant receiving the bounty or bounties erein-before provided for shall be re-indentured by the Immigra- on Agent from year to year for the space of five years, in cordance with the provisions of an Act of the said Island ssed in the nineteenth year of Her Majesty's reign, intituled An Act to alter the law of contracts in regard to Immigrants, and for the encouragement of Immigration, and for the general regulation of Immigrants:" Provided always, that nothing in is Act contained shall be construed to interfere with the right any Immigrant to back passage under the provisions of the cts of the Legislature of Grenada in that case made and ovided at the expiration of such additional term of five years rvice. Immigrants receiving such bounty to be re-indentured for 5 years in accordance with Act No. 230. Proviso not to interfere with right to back passage.

Appendix No. 36.

Bahamas.

Salt Ponds.

Government Notice.

His Excellency the Governor has directed it to be notified for the information of lessees of salt pond allotments on the Islands of Inagua, Rum Cay, and Exuma, that his Excellency has, by a Despatch dated the 15th November last, received the sanction of Her Majesty's Principal Secretary of State for the Colonies to the substitution of a royalty of one farthing per bushel on all salt shipped, in lieu of the present fixed rate of one pound ten shillings per acre per annum, on the following terms and conditions:

1st. That the lease be in perpetuity, subject only to resumption by the Crown if, without the express permission of the Governor of the Colony for the time being, the allotment be not cultivated for two years in succession, or if it be proved to the satisfaction of the said Governor of the Colony that, through the neglect of the proprietor or his agents, such allotment has not for three years in succession yielded a fair average crop.

2nd. That before the lease in perpetuity be granted all arrears of rent be paid or satisfactory security be given for the payment.

3rd. That the right to occupy all abandoned allotments or uncultivated salina in the ponds on the before-named Islands be sold at public auction for a cash bonus; and

4th. That the imposition of this royalty on salt in the Bahamas as a substitute for Remal, will not relieve it from the liability to any duty which the Colonial Legislature may think fit to impose, for the purpose of general revenue.

All persons, therefore, in the possession of allotments in those Islands which are now held under leasehold tenure, are required within three months from this date to notify to this department their willingness or unwillingness to abide by the terms now offered, and those parties in arrear for rent who have not yet entered into a satisfactory arrangement for their arrears are required to do so before the 1st February ensuing, or their allotments will be resumed.

By order of his Excellency the Governor,
J. B. Burnside.
Acting Surveyor General, and Commissioner of Lands and Salt Ponds.

Surveyor General's Office,
Nassau, Dec. 19th, 1867.

Appendix No. 37.

South Australia.

An Act (No. 21. of 1867) to amend the Laws relating to the leasing, for pastoral purposes, of certain Waste Lands of the Crown in the Province of South Australia, and for other purposes. [Assented to, 19th December 1867.]

Whereas it is expedient to amend the laws relating to the leasing, for pastoral purposes, of certain waste lands of the Crown in the Province of South Australia, and it is also expedient to authorize the Governor to remit to certain of the pastoral lessees of the Crown the payment of certain rent as herein-after mentioned: Be it therefore enacted, by the Governor-in-Chief of the Province of South Australia, with the advice and consent of the Legislative Council and House of Assembly of the said Province, in this present Parliament assembled, as follows: Preamble.

1. This Act may be cited for all purposes as "The Waste Lands Amendment Act, 1867." Short title.

2. In the construction of this Act, unless inconsistent with the context or subject matter, the following words shall have the meaning hereby assigned to them respectively; that is to say— Construction.

"Lessee" shall mean as well lessee as the assignee or personal representative of such lessee.

"Sheep" shall mean and include rams, wethers, and ewes, and lambs over six months old.

"Cattle" shall mean and include all horses, mares, geldings, bulls, bullocks, and cows, and also all calves and foals over six months old.

3. Such of the lessees for pastoral purposes or persons having preferential claims under the Waste Lands Regulations to leases of any portion of the waste lands of the Crown for pastoral purposes, included in the districts A, B, or C, which districts are severally described in the first Schedule hereto, as may be desirous of availing themelves of the benefit of this Act, may do so by giving notice in writing to the Commissioner of Crown Lands and Immigration, within two calendar months from the passing hereof, of their desire to surrender their present leases or rights of renewal or claims to leases, and to obtain new leases, which notice, if by a lessee, may be in the form or to the effect following; that is to say— Certain pastoral lessees may surrender present and obtain new leases by giving notice.

To the Commissioner of Crown Lands and Immigration.

Sir—I [*name at full length*], of [*place of abode and description*], being the lessee of that portion of the waste lands of the Crown included in lease [*or leases*] numbered , do hereby give you notice that it is my desire to surrender such lease [*or leases*], and to obtain a fresh lease [*or leases*] under "The Waste Lands Amendment Act, 1867."

Dated this day of , 18 .

Provided that if such notice shall be given by any person having a preferential claim to a lease as aforesaid, the form thereof may be altered so as to meet the circumstances of the case.

On receipt of notice Governor may grant new lease.

4. On receipt of any such notice within the period aforesaid, it shall be lawful for the Governor to demise to the lessee or person giving such notice the lands included in the lease or leases, claim or claims, so surrendered at the rent and for the term of years or respective terms of years to be ascertained as herein mentioned, upon such conditions and clauses of forfeiture and of resumption as are herein-after mentioned, or as may be prescribed by any regulations to be made under the provisions of this Act under the power in that behalf herein-after contained: Provided that, if any such demise shall terminate, either by effluxion of time or otherwise, the land comprised therein shall not be re-let for pastoral purposes without the same having been first offered to be let to the person bidding the highest rent for the same at public auction not less than the expiration of six months before the expiration of such lease: Provided also, that no lease under this Act shall contain lands included partly in one district and partly in another.

New lease of lands surrendered not included in any district.

5. If any lease surrendered under the last preceding section shall comprise lands included in one or other of the said districts A, B, or C, and also other lands not so included, the Governor shall grant a new lease of the lands not so included to the lessee so surrendering for the unexpired portion of the term comprised in such lease, at the same rent and assessment, and upon the same conditions in all respects as were contained in the lease so surrendered.

Term for which new leases to be granted.

6. New leases granted under section four shall be for the respective terms next mentioned; that is to say—If the lands to be demised are included in district A, such term shall be for fourteen years from the thirty-first day of December, one thousand eight hundred and sixty-seven; and if in districts B or C, such term shall be for twenty-one years from the said thirty-first day of December, one thousand eight hundred and sixty-seven; Provided that the government shall have full power at any time during the currency of any lease granted under the provisions of this Act, should the land be required for sale or other public purposes, to resume possession of all lands so leased on giving six months notice to the lessee: Provided also, should the land so leased be resumed during the first half of the term of any lease the full value of all improvements shall be paid to the lessee; if resumed during the third quarter of any lease one-half of the value of all improvements shall be paid to the lessee; and if resumed during the last quarter of the term of any lease, no payment shall be made on account of improvements, except on account of permanent wells, as provided for in clause 17 of this Act.

Rents to be payable under new leases.

7. The rents to be reserved in leases of lands demised under the provisions of this Act shall be as follows; that is to say—

I. Where the lands demised are situate in district A, the yearly rent to be paid by the lessee shall be a sum

equivalent to sixpence per head on the average number of sheep, and three shillings per head on the average number of cattle actually depasturing on the lands included in the lease, such average number to be ascertained as herein-after provided;

II. Where the lands demised are situate in district B, such rent shall be a sum equivalent to fourpence per head on the average number of sheep, and two shillings per head on the average number of cattle so actually depasturing as aforesaid; and

III. Where the lands demised are situate in district C, such rent shall be a sum equivalent to twopence per head on the average number of sheep, and one shilling per head on the average number of cattle, so actually depasturing as aforsaid;

Provided, however, that in no case shall such yearly rent be less than the amounts next mentioned; that is to say—For all lands situate in district A, the sum of twenty shillings for each square mile; for all lands situate in district B, the sum of eight shillings and fourpence for each square mile; and for all lands situate in district C, the sum of two shillings and sixpence for each square mile; it being the intention hereof that the respective sums last mentioned shall be paid by the lessees of all lands in the said districts A, B, and C, although no stock shall be depasturing thereon.

Rents to be paid half-yearly and return of stock depasturing to be forwarded to Commissioner of Crown Lands.

8. The rents under the leases to be granted as before mentioned shall be payable on the thirtieth day of June and on the thirty-first day of December in each year; and, for the purpose of ascertaining the average number of sheep and cattle actually depasturing on the lands included in any such lease, and of fixing the amounts to be paid on such respective days, every lessee of any of the lands included in any such lease, or in case of the absence of any such lessee, then the overseer or other person having the care and management of the lands or run included in any such lease, shall, within three days from the first day of June in each year, fill up and forward to the Commissioner of Crown Lands, through the medium of the general post office—the letter or envelope enclosing such statement or return being registered—a statement or return, in the form in the second Schedule hereto, of the number of all sheep and cattle, whether belonging to such lessee or not, which, on such first day of June, and also on the first day of February and the first day of April then last past, were actually upon or depasturing on the lands included in each lease (if more than one) under which the lands forming such run were held; and such lessee, overseer, or other person as aforesaid shall also, within three days from the first day of December in each year, fill up and forward a like statement or return in the form also contained in the said second Schedule of the number of all sheep and cattle as aforesaid which, on such first day of December, and also on the first day of August and the first day of October then last past, were actually upon or depasturing on such lands as aforesaid; and such statement or return to be forwarded

in December as aforesaid shall also contain a statement of the total number of sheep actually shorn at all the stations on such lands at the shearing then last past, and the rent to be paid on the said thirtieth day of June and thirty-first day of December respectively shall be calculated on the average number of sheep and cattle actually upon or depasturing on such lands at the dates mentioned in such statement or return, and next preceding such thirtieth day of June or thirty-first day of December, as the case may be.

Penalty for false return.

9. Such statement or return shall be signed by the lessee, overseer, or other person making the same, and shall be certified by him to be correct in all particulars; and if any such lessee, overseer, or other person shall wilfully make, sign, or forward any false statement or return, as aforesaid, or shall make or practise any fraudulent contrivance or device whatever, with intent thereby to conceal or misrepresent the number of sheep or cattle actually upon or depasturing on any land demised under this Act at the respective dates mentioned in such statement or return, such lessee, overseer, or other person so offending shall for every such offence forfeit and pay a sum of not less than fifty pounds nor more than two hundred pounds, and the lease of the lands in respect of which such false statement or return is made, may be declared to be forfeited, as herein-after mentioned.

Penalty for driving stock off run with a view to evade correct return.

10. If any lessee, or any overseer or other person in the employ of such lessee, shall drive or cause to be driven any sheep or cattle off the lands leased to such lessee in one district on to lands leased to such lessee in another district, or on to any other lands, whether such lands may be leased to other persons or not, and thereby diminish the number of sheep or cattle actually upon or depasturing on any lands so leased at the respective times when, according to the statement and return before mentioned, the number of such sheep or cattle so actually upon or depasturing on such lands must be certified by such lessee, overseer, or other person as aforesaid, with intent to diminish the number of sheep or cattle which should have been included in such statement and return, such lessee, overseer, or other person shall for every such offence forfeit and pay a sum of not less than fifty pounds nor more than two hundred pounds, and the lease of the lands off which such sheep or cattle shall be so driven as aforesaid may be declared to be forfeited as herein-after mentioned.

If overseer convicted lessee also liable to pay fine.

11. If any overseer or other person as aforesaid shall be convicted under either of the two last preceding sections, he shall be personally liable to pay any fine imposed; and the lessee in whose employ such overseer or person may be shall also be liable to pay a fine of a like amount to that imposed upon the overseer or other person as aforesaid.

Penalty for omitting to forward return.

12. If any lessee, overseer, or other person as aforesaid shall omit to fill up and forward such statement or return at the times herein-before provided for forwarding the same, a sum of ten pounds for every week during which such omission continues shall be added to the rent payable under the lease in respect of which such omission has been made; and in case such lessee,

overseer, or other person shall omit to forward such statement or return for the space of one calendar month, the lease in respect of which such statement or return has been omitted to be forwarded may be declared to be forfeited as herein-after mentioned.

Penalties on nonpayment of rent.

13. If the rent payable under any lease granted under this Act (other than leases granted under section 5) is not paid on or before the days whereupon the same is hereby made payable, a penalty of ten pounds per centum shall be added to such rent; and if such rent continues unpaid for the space of one calendar month a penalty of twenty pounds per centum shall be added; and if the said rent and penalty be not paid within one month after such first month, the same shall be recoverable by the Commissioner of Crown Lands, by action in any court of competent jurisdiction, and the lease on which such rent and penalty continues unpaid shall be absolutely forfeited: Provided nevertheless, that it shall be lawful for the Governor, with the advice of the Executive Council, to waive such forfeiture upon payment of the rent and penalty, or upon such other terms as may be deemed reasonable.

Rule to show cause why lease should not be forfeited in certain cases.

14. If the Attorney General shall suspect that any lessee, overseer, or other person as herein-before mentioned, has forwarded any false statement or return, or has otherwise endeavoured to evade the provisions of sections eight, nine, or ten of this Act, or if such lessee, overseer, or other person shall omit to forward such statement or return as herein-before provided for the space of one calendar month, then, and in any or either of such cases, the said Attorney General may apply to the Supreme Court of the said Province for a rule, which shall be granted as of course, calling upon such lessee to show cause, on a day to be mentioned in such rule, why the lease held by such lessee should not be forfeited on any of the grounds aforesaid to be set forth in such rule; and the said rule may be served either upon the lessee, or, in case of his absence from the said Province, upon the overseer or other person having the care and management of the lands included in the said lease as aforesaid, and such service may be effected by serving such rule personally upon such lessee, overseer, or other person as aforesaid, or by sending the same to him through the medium of the General Post Office, addressed to such lessee, overseer, or other person at his last known or usual place of abode or business in the said Province.

Supreme Court may declare lease to be forfeited.

15. If on the day mentioned in such rule, or if the Court shall not sit on that day, on the first day thereafter that the Court shall be sitting, such lessee does not attend, either personally or by counsel, or being in attendance does not, by affidavit or otherwise, to the satisfaction of the Court, disprove the charges set forth in such rule as the grounds on which it is sought to have such lease declared forfeited, the said Court may and it is hereby authorized and empowered to order and declare such lease to be forfeited, and thereupon such lease shall become absolutely null and void; and such order of the Court shall be binding

upon all parties, whether such parties were before the Court or not, and shall not be liable to be avoided or set aside for any irregularity in the service of the rule to show cause, or on any ground whatever; nor shall there be any appeal from any such order, which shall be absolutely final and conclusive.

Court may allow time to lessee to rebut charges, and may direct issues.

16. The said Court, on the hearing of any such rule to show cause as aforesaid, may give to any such lessee such time as to the Court may seem reasonable for the purpose of enabling him to file such affidavits as he may consider necessary for the purpose of disproving the charges set forth in the said rule, and may also allow further time to the Attorney General to file any affidavits in reply as to the Court may seem expedient; and the said Court may also, if it shall see fit, direct the truth of the charges set forth in the said rule to be decided otherwise than by affidavit, and for that purpose may direct one or more issue or issues to be tried by a jury in the like manner as issues directed by the Court in its equitable jurisdiction are tried, but in all such proceedings the proof that the charges set forth in such rule are untrue shall lie on the defendant.

No right of renewal in leases under this Act.

17. No lessee holding any lease under this Act (except of lands not included in either of said districts A, B, or C, granted under section five) shall be entitled to any right of renewal or to any compensation for improvements, anything in the Act No. 22 of 1864 to the contrary notwithstanding; but, at the expiration of any such lease, the lands therein included, together with all improvements made thereon, shall vest absolutely in Her Majesty, Her heirs and successors, for the public uses of the said Province: Provided nevertheless, that at the termination of any such lease the person beneficially interested in the lands then held under the same shall be paid, out of the general revenue of the said Province, for all wells of a permanent character available for the use of stock which may increase the carrying capabilities of the lands comprised in such lease and which may have been made during the last seven years of the term granted by such lease, and the amount to be so paid shall be ascertained as follows; that is to say—For all such wells as have been completed and have been used only during the last year of the said term the amount to be paid shall be the full value thereof, such value to be decided in such manner as may be prescribed by the regulations to be made under this Act; for all such wells as have been completed and have been used during the last year but one of the said term the amount to be paid shall be six-sevenths of the full value thereof, to be decided as aforesaid, and so on for each of the last seven years of the said term, one-seventh part of the full value of all such wells being deducted for every year of the said term unexpired at the time of the completion of any such wells.

Lands in districts A, B, and C not previously leased to be under provisions of this Act.

18. Leases for pastoral purposes of any portion of the waste lands of the Crown included in the said districts A, B, or C, which have not heretofore been held under lease, may be granted by the Governor for a term not exceeding twenty-one years, anything in "The Waste Lands Amendment Act, 1865–6," to the contrary

notwithstanding: And at the expiration of the term the land and all improvements thereon shall revert absolutely to Her Majesty, Her heirs and successors, as waste lands of the Crown of the said Province: Provided nevertheless, that at the termination of any such lease the person beneficially interested in the lands then held under the same shall be paid out of the general revenue of the said Province for all wells of a permanent character available for the use of stock which may increase the carrying capabilities of the lands comprised in such lease, and which may have been made during the last seven years of the term granted by such lease; the amounts to be so paid being ascertained in the same manner as is prescribed for the purpose of ascertaining the amounts to be paid under the last preceding section.

Covenants for repair and for payment of local rates and taxes to be inserted in leases.

19. In every lease to be made under the authority of this Act (except of lands not included in either of the said districts A, B, or C, granted under section five) there shall be included a covenant on the part of the lessee to keep in good condition and repair all houses, fences, and improvements on the lands included in such lease, reasonable wear and tear, and damage by fire, storm, and tempest only excepted, and also a covenant to pay all local rates which may be charged or imposed upon the said lands for the improvement of any portions of the said districts A, B, or C; but, save as last mentioned, the due payment of the rents by this Act authorized to be reserved in such leases shall be in full of all taxes, rates, assessments, or impositions upon the land included in such lease, or on the stock depastured thereon, to be imposed by the Parliament of the said Province or otherwise, save and except any general taxes or impositions which may be imposed upon all lands or stock within the said Province.

Lessees in arrear for rent may pay up till 24th December 1867.

20. Such of the lessees for pastoral purposes of any of the waste lands of the Crown included wholly or partially in either of the said districts A, B, or C as are in arrear in payment of rent and assessment due up to the thirty-first day of December, one thousand eight hundred and sixty-seven, and whose leases are consequently liable to forfeiture, may, at any time before the twenty-fourth day of December, one thousand eight hundred and sixty-seven, pay up such arrears without penalty (subject, however, in respect of lands included in district B or C, to such remission of rent as is herein-after mentioned), and shall thereupon be entitled to the benefit of this Act; but all leases of lands included wholly or partially in either of the said districts A, B, or C, in respect of which any such arrears are unpaid on the said twenty-fourth day of December, shall be absolutely forfeited, and the Commissioner of Crown Lands shall cause a lease or leases of all lands comprised in any leases so forfeited to be offered for sale at public auction, in such blocks as to him may seem expedient; and the person who at any such auction shall be the highest bidder for any lease shall be the purchaser thereof, and shall be entitled to the like benefits and advantages, and to have a lease or leases of such lands, under the provisions of this Act, for the like term or terms, and under and subject to the like stipulations and agreements, as if such person

had, previously to the passing hereof, actually been the lessee thereof, and had duly paid all rent and assessment due in respect thereof, and given notice of his desire to avail himself of the provisions of this Act, as provided by Section 3.

Remission of rent to lessees in districts B and C availing themselves of this Act.

21. Such of the lessees for pastoral purposes of any of the waste lands of the Crown included in districts B or C as shall elect to avail themselves of the provisions of this Act shall be entitled to have remitted to them, and the Governor in Executive Council shall remit to them accordingly, payment of twelve months' rent and assessment according to the rate of such rent and assessment under their present leases: Provided, that where any such lease includes lands in district A as well as in either of the districts B or C, no remission shall be granted in respect of such portion of the said lands as are included in district A: Provided also, that no person who shall become the purchaser of any forfeited lease, under the last preceding section, shall be entitled to any such remission in respect of such lease.

Lessees, who previously claimed extension, to also have benefit of Remission of Rent Act on coming in under this Act.

22. Any pastoral lessee of the Crown who, having availed himself of the benefit of "The Waste Lands Amendment Act, 1865–6," shall now avail himself of the provisions of this Act, shall be entitled to the like remission of rent and assessment as if such lessee had duly requested remission of rent and assessment under the provisions of "The Remission of Rent Act, 1865–6," and the same shall be remitted by the Governor in Executive Council accordingly.

Governor to make regulations.

23. The Governor, with the advice of the Executive Council, may from time to time make, alter, and vary regulations respecting the terms and conditions upon which leases of lands included in the said districts A, B, or C shall be granted for pastoral purposes under the provisions of this Act, and for regulating the form of claims for any such leases and the forms thereof, and generally for giving effect to the provisions of this Act; and all such regulations, when published in the *Government Gazette*, shall have the force of law: Provided that a copy of all regulations made under the authority of this Act shall be laid before Parliament within fourteen days from the publication thereof, if Parliament shall be then sitting; and if Parliament shall not be then sitting, then within fourteen days from its next sitting for the dispatch of business.

Present regulations not to affect lands in districts A, B, or C.

24. The regulations now in force made under the authority of "The Waste Lands Act," No. 5. of 1857, shall from the passing hereof cease to have any effect so far as concerns the leasing for pastoral purposes of any of the Waste Lands of the Crown included in any of the said districts A, B, or C.

Summary procedure.

25. All proceedings for the recovery of any pecuniary penalty by this Act imposed for any omissions, defaults, acts, or offences shall be had and taken, and may be heard and determined in a summary way, by any special magistrate or two justices, under the provisions of an Ordinance of the Governor and Legislative Council, No. 6 of 1850, "To facilitate the performance of the "duties of Justices of the Peace out of sessions with respect to "summary convictions and orders," or of any Act hereafter to be

in force relating to the duties of justices with respect to summary convictions and orders, and all convictions and orders may be enforced as in the said Ordinance or in any other Act is or shall be provided ; and the said special magistrate or justices may also, in case any penalty is imposed, order the defendant, in default of payment thereof, to be imprisoned, with or without hard labour, for any period not exceeding six calendar months.

In certain proceedings *onus probandi* to rest on defendant.

26. In any proceeding for the recovery of any penalty for making a false statement or return as provided by section 9, or for driving sheep or cattle off any run as provided by section 10, the averment that the defendant has committed the act complained of shall be sufficient without proof of the fact, unless the defendant prove to the contrary.

Appeal to Adelaide Local Court of Full Jurisdiction.

27. There shall be an appeal from any conviction by any special magistrate or justices for any offence against this Act, or from any order dismissing any information or complaint, which appeal shall be to the Local Court of Adelaide of Full Jurisdiction only, and the proceedings on such appeal shall be conducted in manner appointed by the said Ordinance No. 6 of 1850 for appeals to local courts, or any Act hereafter to be in force regulating such appeals ; but the Local Court of Adelaide aforesaid may make such order as to the payment of the costs of appeal as it shall think fit, although such costs may exceed ten pounds.

Local Court, upon hearing of appeal, may state special case.

28. The Local Court of Adelaide, upon the hearing of any appeal, may state one or more special case or cases for the opinion of the Supreme Court, and the Supreme Court shall hear and decide such special case or cases according to the practice of the Supreme Court on special cases, and the Supreme Court shall make order as to costs of any special case as to the said Court shall appear just ; and any two or more justices, or the Local Court of Adelaide, shall make an order in respect to the matters referred to the Supreme Court, in conformity with the certificate of the said Supreme Court, or of any judge thereof ; which order of the justices or local court shall be enforced in manner provided for the enforcement of orders of justices, under the said Ordinance No. 6. of 1850, or other Act as aforesaid ; and, save as herein provided, no order or proceeding of any special magistrate or justices, or of any local court, made under the authority of this Act, shall be appealed against, or removed by *certiorari*, or otherwise, into the Supreme Court of the said Province.

Disposal of penalties.

29. All monies received for penalties imposed for offences against this Act shall be paid to the treasurer on behalf of Her Majesty, Her heirs and successors, for the public uses of the said Province, and in support of the government thereof.

In the name and on behalf of the Queen, I hereby assent to this Act.

D. Daly,
Governor.

THE FIRST SCHEDULE.

District A.

District A includes all lands lying between the following lines, viz.: Starting from Darke's Peak (a trigonometrical station on the Port Lincoln Peninsula, about forty-two miles west-north-west from Franklin Harbour); thence about thirty-one and a quarter miles due south to a point four and a half miles west of Mount Priscilla, a detached hill in the scrub lying about twelve and three quarter miles, 28° west of south, from Mount Shannon; thence east about twenty-six and a half miles to the coast, passing through Mount Priscilla; thence crossing Spencer's Gulf in a direction 6° south of east, to the north-western corner of the Hundred of Kulpara; thence six and a half miles east along the northern boundary of same; thence to a point, five and a quarter miles, 38° north of east; thence to a point sixteen miles 7° 30′ east of north, and fifteen miles 11° 30′ east of north; thence to a point 3° east of north for seventeen and a quarter miles; thence 13° west of north for ten miles sixteen chains; then 8° 30′ west of north for two miles fifty-six chains, 23° west of north for three miles twenty-eight chains, 17° west of north for two and a half miles, and north for one mile thirty-two chains; thence one mile and a quarter east to the western boundary of the Hundred of Wongyarra, ten and a half miles north along the western boundary of same, and three and a half miles east to Mount Remarkable; thence ten miles sixty-eight chains, 24° west of north, and eight and three quarter miles east along the western and northern boundaries of the Hundred of Gregory; thence ten miles south along the eastern boundary of the said Hundred, and a further distance of ten and three quarter miles south, along a portion of the eastern boundary of the Hundred of Wongyarra; thence to a point 5° 45′ south of east for eleven miles, and four and a half miles 5° 45′ east of north; thence five and a half miles, 24° 30′ east of north, to the foot of range, and about six miles along same to Pekina Hill; thence three quarters of a mile east, and four miles twenty-four chains, 20° east of south, to Nepowie water; thence to a point eight miles, 8° east of south, two miles 5° 30′ south of east, and one mile forty-eight chains 31° south of east; thence to a point five miles fifty-six chains, 17° 30′ south of east, and one and a quarter miles 14° west of south; then six and a quarter miles, 13° 30′ east of south; thence to a point 3° east of south for six and a half miles, and 5° 30′ west of south for three and a half miles; thence to a point 5° 30′ south of east for six miles; thence two and a quarter miles 30° south of east, two miles 34° south of east, two miles eight chains 39° south of east, and two and a quarter miles 43° south of east; thence 2° west of south to a point on the northern boundary of the Hundred of Hallett, and one and three quarter miles east along portion of same to its north-eastern corner; thence south for thirty-eight miles twenty-four chains, being the eastern boundary of the Hundreds of Hallett, Kingston, Kooringa, and portion of Apoinga; thence 5° 45′ south of east for three and a quarter miles, and 26° east of south for six miles sixteen chains; thence five miles forty-eight chains east along portion of the northern boundary of the Hundred of English to its north-eastern corner, and nine miles sixty-four chains south along the eastern boundary of the said Hundred; then four and a half miles east to the north-eastern corner of the Hundred of Neales, and twelve and a quarter miles south along the eastern boundary of same, and portion of the Hundred of Dutton; thence ten miles east along the northern boundary of the Hundred of Anna, and a further distance of three quarters of a mile

east along the southern boundary of the Hundred of Hay; thence eleven miles north, parallel to the western boundary of the Hundred of Hay, and three quarters of a mile west to its north-west corner; thence 46° west of north for fifteen and a half miles, 28° west of north for twelve and three quarter miles, and 23° west of north for twelve and a quarter miles, to a point near Baldina Creek; thence about 5° 30′ east of north for six miles thirty-two chains; thence one mile thirty-two chains 5° 30′ south of east, eight and three quarter miles 5° 30′ east of north, and about seventy-two chains west; thence four miles eight chains 5° 30′ east of north, and four and a half miles 33° 30′ west of north; thence for sixteen miles, about 5° 30′ east of north; thence to a point three quarters of a mile 5° 30′ south of east; thence three and a quarter miles 23° 30′ east of north, 1° 30′ west of north for six and a half miles, one and three quarter miles 5° 30′ north of west, and four miles twenty-eight chains 10° 30′ east of north; thence one mile 5° 30′ south of east, and ten miles 5° 30′ east of north to a point about one and three quarter miles 24° north of east from Nackara Hill; thence four miles 26° 30′ west of north, and twelve and a half miles 5° 30′ north of west, passing about one and a half miles north of Buttamuc Hill; thence to a point 33° north of west for three miles, and ten and one third miles 33° 30′ west of north; thence to a point nine miles twelve chains 20° 30′ west of north; thence 6° north of west for six and a half miles to a point about four miles south of Price's Hill; thence 20° south of west for four miles twenty-four chains, 35° west of south for nine and three quarter miles, and 28° 30′ south of west for six miles sixteen chains; thence north-west by west for two miles seventy-two chains, whence 18° 30′ north of west for nine and a quarter miles, 13° south of west for nine miles sixty-four chains, and about one mile south to Mount Brown Trigonometrical Station; thence to a point 4° 30′ east of south for eight and a half miles, and 20° west of south for six miles forty-eight chains to Mount Gullet, from which point 20° north of west for two miles seventy-two chains, and west by south for three and a half miles to the coast of Spencer's Gulf, near Port Ferguson, and about three quarters of a mile north-westerly from Mount Grainger; thence crossing the Gulf to its western shore, and following the coast by Point Lowly and Mount Young to a point about eleven miles south of the Murninnie Mine; and finally returning west to Darke's Peak.

District B.

District B includes all lands lying between the following lines, viz.: Starting from Wudinna Trigonometrical Station; thence 2° north of east, for ten miles seventy-two chains, to Corrabinnie Hill; thence 21° north of east, for forty-four miles, to Wilcherry Hill; thence east by north, for seventeen and three quarter miles, to Harris's Bluff; thence to a point fourteen miles thirty chains 28° north of east; thence 31° north of east for twenty and a half miles, and 15° north of east for twenty-one and a quarter miles; thence eleven miles sixty-four chains 15° 50′ north of east; thence east for seven miles, and 7° north of east for ten miles (the latter line passing about half a mile to the north of Dutchman's Stern Hill); thence nine miles seventy chains east, eleven miles 12° 30′ north of east, nine miles forty-eight chains 26° 30′ north of east, six miles fifty-four chains 42° 30′ south of east, and eighteen miles fifty-six chains 20° south of east (the latter line passing about seventy-two chains south of Marchant's Hill; thence to a point 18° south of east for twenty-seven miles twenty-four chains, and 38° 30′ south of east, for seven miles, to a point about two and a quarter miles north-easterly of Yunta Hill; thence 6° 45′ east of south for twenty-one miles, and 6° west of south for eleven miles seventy-two chains;

thence to a point 4° west of south for fifty-eight and three quarter miles, and 6° east of south for six miles twenty-four chains; thence south-south-east for four miles, and south for ten miles forty-eight chains, to a point on the northern boundary of the Hundred of Hay; thence two miles thirty-two chains west to the north-western corner of the said Hundred; thence 46° west of north for fifteen and a half miles, 28° west of north for twelve and three quarter miles, and 23° west of north for twelve and a quarter miles, to a point near the Baldina Creek; thence to a point about 5° 30′ east of north for six miles thirty-two chains; thence one mile thirty-two chains 5° 30′ south of east, eight and three quarter miles 5° 30′ east of north, and about seventy-two chains west; thence four miles eight chains 5° 30′ east of north, and four and a half miles 33° 30′ west of north; thence, for sixteen miles, about 5° 30′ east of north; thence to a point three quarters of a mile 5° 30′ south of east; thence three and a quarter miles 23° 30′ east of north, 1° 30′ west of north for six and a half miles, one and three quarter miles 5° 30′ north of west, and four miles twenty-eight chains 10° 30′ east of north; thence one mile 5° 30′ south of east, and ten miles 5° 30′ east of north, to a point about one and three quarter miles 24° north of east from Nackara Hill; thence four miles 26° 30′ west of north, and twelve and a half miles 5° 30′ north of west, passing about one and a half miles north of Buttamuc Hill; thence to a point 33° north of west for three miles, and ten and one third miles 33° 30′ west of north; thence to a point nine miles twelve chains 20° 30′ west of north; thence 6° north of west, to a point about four miles south of Price's Hill; thence 20° south of west for four miles twenty-four chains, 35° west of south for nine and three quarter miles, and 28° 30′ south of west for six miles sixteen chains; thence north-west by west for two miles seventy-two chains; whence 18° 30′ north of west for nine and a quarter miles, 13° south of west for nine miles sixty-four chains, and about one mile south to Mount Brown Trigonometrical Station; thence to a point 4° 30′ east of south for eight and a half miles, and 20° west of south for six miles forty-eight chains, to Mount Gullet; from which point 20° north of west for two miles seventy-two chains, and west by south for three and a half miles, to the coast of Spencer's Gulf, near Port Ferguson, and about three quarters of a mile north-westerly from Mount Grainger; thence, crossing the Gulf to its western shore, and following the coast by Point Lowly and Mount Young, to a point about eleven miles south of the Murninnie Mine; thence west to Darke's Peak Trigonometrical Station; thence about thirty-one and a quarter miles due south to a point four miles and a half west of Mount Priscilla; thence 14° north of west to Tooligie Hill; thence to a point seventy-two chains, 5° south of west; thence 40° west of north for twenty-eight and a quarter miles; thence four miles west, two miles thirty-two chains 28° west of south, and three and a half miles 9° south of west; thence to a point 5° east of north for two and a half miles, 25° south of west for three miles, 1° north of west for three and a quarter miles, and 16° north of west for one and a half miles; thence twelve chains north, three quarters of a mile 37° north of west, one mile twenty-eight chains 20° south of west, one mile 19° north of west, and one mile 5° 30′ east of north; thence to a point 4° north of west for three and a half miles, passing a few chains south of the Wedge Hill Trigonometrical Station; thence seven miles 36° north of west, and one mile twenty-four chains 42° west of north; thence to a point one mile twenty-four chains 10° east of north; thence for six miles 30° 30′ west of north, and for two miles fifty-six chains 4° north of west to a point lying two and three quarter miles north-easterly from Talia Hill; thence 2° 30′ east of north for seven and three quarter miles; thence to a point 15° 30′ west of north for ten miles; thence 4° north of west for four miles, and 29° north of west for eight miles thirty-six chains, to a

point two miles north-north-easterly from Mount Cooper; thence 31° north of west for six miles forty-eight chains; thence to a point two and a half miles 2° north of west, and eight and a quarter miles 2° east of north; thence 2° north of west for seven miles seventy-six chains, to a point lying three miles nearly north by west from Medlingie Hill; thence three miles 2° west of south to a point half a mile west of the said Medlingie Hill; thence three and three quarters miles 2° north of west, and one mile twenty-four chains 2° east of north; thence 3° 30′ north of west for five miles, and a quarter of a mile 2° west of south; thence 2° north of west for five and a half miles, passing through Onetree Hill, and striking the shore of Streaky Bay, about half a mile north-easterly from the township of Flinders; thence along the sea coast to the 129th meridian of east longitude, being the western boundary of the province; thence about forty-eight miles north to the 31st parallel of south latitude, and east along the said parallel to its intersection with the 132nd meridian of east longitude; thence east-south-easterly to Yarlbrinda Hill; thence 25° 45′ east of south for sixty-seven and three quarter miles to Tcharkuldu Hill; and finally twenty-two miles thirty-two chains 24° 30′ south of east to Wudinna Hill.

District C.

District C includes all lands in the Province lying to the north of and within the following lines, viz.:—Starting from a point on the eastern boundary of the Province, about sixty-two and a half miles south of the River Murray; thence about sixty and three quarters miles west to the south-eastern corner of the Hundred of Morphett; thence north for forty-seven miles forty-eight chains along the eastern boundary of the Hundreds of Morphett, Giles, Cooper, Paisley, and Randell; thence one and one quarter mile east to the south-eastern corner of the hundred of Cadell; thence twenty-three miles north to the north-eastern corner of the Hundred of Stuart; thence nine miles eight chains west along its northern boundary, and ten and three quarters miles south to the North-west Bend of the River Murray; thence ten miles west along the northern boundary of the Hundred of Eba to its north-western corner; thence north-north-west for four miles, and six miles twenty-four chains 6° west of north; thence to a point 4° east of north for fifty-eight and three quarters miles; thence 6° east of north for eleven miles seventy-two chains, and 6° 45′ west of north for twenty-one miles to a point about two and one quarter miles north-easterly of Yunta Hill; thence 38° 30′ north of west for seven miles, and 18° north of west for twenty-seven miles twenty-four chains; thence to a point eighteen miles fifty-six chains 20° north of west, passing about seventy-two chains south of Marchant's Hill; thence six miles fifty-four chains 42° 30′ north of west, nine miles forty-eight chains 26° 30′ south of west, eleven miles 12° 30′ south of west, and nine miles seventy chains west; thence to a point 7° south of west for ten miles, passing about half a mile to the north of Dutchman's Stern Hill; thence to a point west for seven miles; thence to a point 15° south of west for twenty-one and one quarter miles, and 31° south of west for twenty and a half miles; thence fourteen miles thirty chains 28° south of west, to Harris's Bluff; thence west by south for seventeen and three quarters miles to Wilcherry Hill; thence 21° south of west for forty-four miles to Corrabinnie Hill; thence 2° south of west for ten miles seventy-two chains to Wudinna Trigonometrical Station; thence 24° 30′ north of west for twenty-two miles thirty-two chains to Tcharkuldu Hill, and 25° 45′ west of north for sixty-seven and three quarters miles to Yarlbrinda Hill; thence west-north-westerly to the intersection of the 31st parallel of south latitude, with the 132nd

meridian of east longitude; thence west along the 31st parallel of south latitude to the 129th meridian of east longitude, being the western boundary of the Province; thence north to the 26th parallel of latitude; thence east along the said parallel to the eastern boundary of the Province, and south, along its eastern boundary to the said point of starting, about sixty-two and a half miles south of the River Murray.

All lands within the limits of any Hundred are excepted from this Schedule.

THE SECOND SCHEDULE.

A RETURN of all Sheep and Cattle depasturing on the Waste Lands of the Crown situate in District , and included in Lease No. , between 1st day of December 18 , and the 1st day of June 18 .

Number of Sheep and Cattle actually depasturing on 1st February 18 .		Number of Sheep and Cattle actually depasturing on 1st April 18 .		Number of Sheep and Cattle actually depasturing on 1st June 18 .		Average number of Sheep and Cattle depasturing between 1st December 18 , and 1st June 18 .		Amount of Rent due for the six months ending 30th June 18 .
Sheep.	Cattle.	Sheep.	Cattle.	Sheep.	Cattle.	Sheep.	Cattle.	£ *s.* *d.*

A RETURN of all Sheep and Cattle depasturing on the Waste Lands of the Crown situate in District , and included in Lease No. , between the 1st day of June 18 , and 1st day of December 18 .

Number of Sheep and Cattle actually depasturing on 1st August 18 .		Number of Sheep and Cattle actually depasturing on 1st October 18 .		Number of Sheep and Cattle actually depasturing on 1st December 18 .		Average number of Sheep and Cattle depasturing between 1st June 18 , and 1st December 18 .		Amount of Rent due for the six months ending 31st December 18 .
Sheep.	Cattle.	Sheep.	Cattle.	Sheep.	Cattle.	Sheep.	Cattle.	£ *s.* *d.*

Number of Sheep shorn at last shearing.

I, A.B., of , in the Province of South Australia, the lessee [*or overseer or manager for the lessee, as the case may be*] of the waste lands of the Crown, situate in District , and included in Lease No. , do hereby certify and declare that the above return is a true and correct return in all particulars of the total number of sheep and cattle, whether belonging to me [*if return made by overseer say whether belonging to the said*], or to any other person or persons actually upon or depasturing on the lands comprised in such lease, on the days above specified [*if the declaration is made in reference to the December return, add here*—and also of the number of sheep actually shorn at the shearing last past at all the stations on the lands comprised in such lease]; and I further declare that I have not, nor has any other person or persons, to the best of my knowledge and belief, driven off, or caused to be removed from the lands comprised in such lease, any sheep or cattle, with intent thereby to diminish the number of sheep or cattle which should have been included in this statement and return.

Signed this day of 18 , by me A.B.

Witness—

Appendix No. 38.

South Australia.

An Act (No. 23. of 1867) to repeal "The Mineral Leases Act, 1862," and to make other provisions for the leasing and occupation of the Waste Lands of the Crown in the Province of South Australia for mineral purposes.

[Assented to, 19th December 1867.]

Preamble. Whereas it is desirable to repeal "The Mineral Leases Act, 1862," and to afford additional facilities for the occupation of the waste lands of the Crown for mineral purposes: Be it therefore enacted by the Governor-in-Chief of the Province of South Australia, with the advice and consent of the Legislative Council and House of Assembly of the said Province, in this present Parliament assembled, as follows:

Repeal. 1. "The Mineral Leases Act, 1862," is hereby repealed: Provided the repeal of the said Act shall not thereby invalidate anything heretofore lawfully done under the provisions of the said Act; and no enactment by the said Act repealed shall be hereby revived.

Lands may be leased for mineral purposes for fourteen years. 2. The waste lands of the Crown may be leased, in blocks not exceeding six hundred and forty acres, for the purpose of mining for any mineral or metal, except gold, for a period not exceeding fourteen years, at an annual rental of two shillings and sixpence per acre, with a right of renewal for two further periods of fourteen years each, on payment of a fine on each renewal of not more than one hundred pounds per acre of the land so leased: Provided that nothing in this clause shall be construed to affect any existing right.

Lessee may determine lease. 3. Every lessee shall have power to determine the lease on giving three calendar months' notice in writing to the Commissioner of Crown Lands and Immigration.

Renewal of lease. 4. Any lessee desirous of obtaining a renewal of his lease shall make application to the Commissioner of Crown Lands and Immigration for renewal at least eighteen calendar months before the expiration of the current term of such lease; and in default of such application the right of the lessee to a renewal shall be forfeited.

Fine on renewal. 5. The amount of fine herein-before made payable on any renewal shall be fixed by the Governor, with the advice and consent of the Executive Council, at least twelve calendar months before the expiration of the term of the lease.

Form of lease. 6. Leases shall be in the form in Schedule A to this Act, or to the effect thereof, and shall be by deed, and each lease shall be in duplicate, one part whereof shall be signed by the said Governor and be sealed with the seal of the Province, and the other part

shall be signed, sealed, and delivered by the lessee, and shall bind such lessee, his heirs, executors, administrators, and assigns, to occupy, mine, and work the said land, and the minerals and metals therein and thereunder, under and subject to the conditions, and stipulations, and clauses of forfeiture as are set forth in Schedule B to this Act.

Leases need not be put up to auction.

7. Notwithstanding anything contained in "The Waste Lands Act," it shall not be necessary to cause the lands proposed to be leased to be put up to auction, except as next herein-after provided.

Except renewed, surrendered, or forfeited leases.

8. On surrender of any lease, except for the purpose of obtaining a new lease, as herein-after provided, and on the forfeiture of any lease, and on the expiration of any lease, a lease of the lands comprised therein shall, within six months after the date of such surrender, be offered for sale by public auction to the highest bidder, of which sale at least one calendar month's notice shall be given in the *Government Gazette*, and in case such lease is not sold the land comprised therein may be treated as waste lands of the Crown.

Supreme Court may declare leases void in certain events.

9. It shall be lawful for the Supreme Court, on the application of the Attorney-General, to declare void and forfeited any lease if default shall have been made by the lessee in any or all of the following conditions of such lease; that is to say—If the rent be not paid yearly in advance to the treasurer, or if a sum equal to at least six pounds per acre be not expended in every two years on the land so leased for mining purposes, or, at the option of the lessee, if three men for every eighty acres of land leased be not employed for at least nine months in each year of the term of the lease in working on the land leased and in searching for or raising ores, or if the lessee shall permit any portion of the land to be occupied for other than mining purposes without the permission in writing of the Commissioner of Crown Lands and Immigration.

Proof of fact.

10. In any proceeding under the last preceding clause to obtain any such order of forfeiture, the averment that the defendant has made default in the specific condition mentioned in the application shall be sufficient *primâ facie* evidence of such fact.

Order conclusive.

11. Every order of the Supreme Court shall be final and conclusive: Provided that the said Supreme Court shall have power to relieve against a forfeiture incurred within six months of date of order.

Issue may be directed.

12. For the purpose of ascertaining any question of fact, the said Court may, at their discretion, settle and direct an issue to be tried in manner provided by the "Supreme Court Procedure Amendment Act," for the trial of questions of fact without formal pleadings.

Present lessees may surrender lease.

13. The present lessees of the waste lands of the Crown for mineral purposes, or the assigns of the said several lessees respectively, may by memorial to the Governor apply to be permitted to surrender their present leases, and to obtain the benefit of this Act, such memorial to be lodged in the office of the Commissioner of Crown Lands and Immigration, within

twelve months from the passing hereof; and it shall be lawful for the Governor, with the advice and consent of the Executive Council, to grant such application, or some modification thereof, and to fix the term of the new lease, or refuse the same as may appear necessary and expedient.

Leases may be consolidated.

14. The present and any future lessees of the waste lands of the Crown for mineral purposes may by memorial to the Governor apply to surrender any leases of lands contiguous to each other to which they may be entitled in order to have a new lease granted to them of the whole of the lands included in their respective leases; and it shall be lawful for the Governor, with the advice and consent of the Executive Council, to grant such application, or some modification thereof, and to fix the term of the new lease, or refuse the same as may appear necessary and expedient: Provided that no such new lease shall include more than six hundred and forty acres of land.

Contents of memorial.

15. Every memorial mentioned in the last two clauses shall state the amount of capital expended on the land to which the memorial relates, and the quantity and value of the minerals raised therefrom, and the value of buildings, plant, and machinery thereon, and any further particulars which may be required by any regulation made in pursuance of this Act.

Memorial to be advertised.

16. The Commissioner of Crown Lands and Immigration shall cause notice to be given by publication in the *Government Gazette* for four successive weeks, of every memorial as last aforesaid.

Persons may oppose.

17. Any person, prior to the expiration of the fourteenth day next after the last publication of the notice, may by memorial to the Governor show cause against the application, stating the reasons against the application, a copy of which memorial shall be forthwith published in the *Government Gazette* for four successive weeks.

Need not be put up to auction.

18. In the cases provided in the 13th and 14th clauses, the leases shall not be first put up to auction.

Licences may be granted to search for minerals.

19. The Commissioner of Crown Lands and Immigration for the time being may grant licences to applicants to search for and remove minerals and metals, except gold, from the waste lands of the Crown; and every such licence shall be in force for the period of twelve months from the date thereof, and shall authorize the person therein named, his assigns, licencees, servants, and workmen, during the currency of such licence, to mine and work the land described therein, and to remove and carry away such minerals and metals therefrom; and such licences may be from time to time renewed.

Licencee to have prior right to lease.

20. The holder of any licence shall have a preferential right to make application for a lease of the land described in such licence, and no lease shall be granted of such land to any other person except after notice to the holder of the licence; but no renewed licence shall be granted after an application has been made for a lease of the land described in such licence.

Regulations may be made.

21. It shall be lawful for the Governor, with the advice and consent of the Executive Council, from time to time to make,

vary, and alter any regulations respecting the terms and conditions upon which licences and leases of lands shall be granted for the purpose of mining for minerals and metals, except gold; respecting the form of applications for and defining the shape and position of the lands proposed to be leased or worked; the amount of fee to be paid for licences; the transfer of licences and leases; and respecting all other matters and things necessary to give effect to this Act; and every such regulation, when published in the *Government Gazette*, shall have force of law.

To be laid before Parliament.

22. A copy of all regulations made under the authority of this Act shall be laid before the Parliament within fourteen days from the publication thereof, if the Parliament be then sitting; and if the Parliament shall not then be sitting, then within fourteen days from its next sitting for the despatch of business.

Lands may be resumed for townships.

23. It shall be lawful for the Governor, on the application of any lessee, to resume any portion of the lands comprised in any such lease for the purpose of laying out a township, or other purpose of public convenience; and at any sale that may be made of any of the lands so resumed the right of working for minerals may be reserved to the Crown, or to the lessee from whom the land so sold may have been resumed.

24. This Act may be cited as "The Mineral Leases Act, 1867."

In the name and on behalf of the Queen, I hereby assent to this Act.

D. Daly, Governor.

SCHEDULES referred to.

A.

South [Royal Arms] *Australia.*

This indenture made the day of in the year of our Lord one thousand eight hundred and sixty- between of the one part and for heirs, executors, administrators, and assigns, herein-after designated by the term "Lessee," of the other part.

Now this indenture witnesseth that in consideration of the rent the said Governor-in-Chief doth (subject to the reservations herein-after contained) demise and lease unto the said lessee executors, administrators, and assigns, all together with all ways, waters, watercourses, privileges, and appurtenances to the same now belonging or therewith occupied or enjoyed; together also with full and free liberty for the said lessee, executors, administrators, and assigns, and agents and workmen in and upon the said land hereby demised to dig, sink, drive, make, and use all such pits, shafts, levels, watercourses, and other works which it may be necessary to use in finding, seeking for, winning, working, and obtaining the copper and other ores not being gold therein contained, and also to appropriate and use such part of the said lands, either under ground or on the surface, as may be proper and requisite, as well for depositing and laying down such ores and minerals and placing and heaping the waste refuse and rubbish which may be worked along with them from time to time as for washing and obtaining such ore and minerals and for effectually separating them from all the soil and other substances mixed with them, and for smelting or reducing such ore into metal, and also for supplying the said mines and works with water or with good and fresh air as for freeing the same from water or foul air, and for the purposes aforesaid to erect, make, and employ all such fire, steam, water, or other engines, buildings, smelting works, furnaces, workmen's houses, shops, crushing mills, sheds, or hovels, machinery, and works as may be proper and reasonable, together also with liberty for him and them to erect upon the said land hereby demised smelting works and furnaces, hovels, and other offices belonging to or necessary for the said works, and all other necessary or convenient powers, authorities, privileges, and advantages for all or any of the purposes aforesaid, subject to the provisions of the Mineral Leases Act, one thousand eight hundred and sixty-seven; to have and to hold the said lands demised, with all mines, veins of copper, and other minerals (except and subject as aforesaid), and all and singular other the premises, with their appurtenances, unto the said lessee executors, administrators, and assigns, from the day of one thousand eight hundred and for and during the full term of years from thence next ensuing and fully to be complete and ended, yielding and paying therefor yearly unto Her Majesty, Her heirs and successors, in advance on the day of and thenceforth in advance at the commencement of every current year during the said term the yearly rent or sum of of lawful British money, the first payment of such rent

in advance to be made on the day of In witness whereof the said parties to these presents have hereunto set their hands and seals in the day and year first above written.

Signed, sealed, and delivered by his Excellency in the presence of }

Signed, sealed, and delivered by the above-named in the presence of }

B.

That the lessee, his executors, administrators, and assigns, shall yearly during the term, at the commencement of every current year of the term, pay or cause to be paid in advance to the Treasurer of South Australia for the time being, on behalf of Her Majesty, Her heirs and successors, the reserved rent, free and clear of all taxes, rates, and outgoings whatsoever; and will not, during the continuance of the term, apply the land for any other use or purpose than for the purpose of mining and smelting without the permission of the Commissioner of Crown Lands and Immigration in writing; and will during the continuance of the term work and carry on such mines in a fair, orderly, skilful, and workmanlike manner; and also that it shall be lawful for Her Majesty, Her heirs and successors, and to and for the Governor for the time being of the said Province, his and their agents and workmen, at all proper and seasonable times during the term, without any interruption from the said lessee or his agents, servants, or workmen, to enter into and upon the premises, and into and upon any mines or works that may be found therein, to view and examine the conditions thereof, and whether the same be worked in a proper, skilful, and workmanlike manner, and for such purpose to make use of any of the railroads or other roads or ways, machinery and works, belonging to such mines and premises; and also that the lessee, his executors, administrators, or assigns, will not at any time during the continuance of the term place or leave any waste or dead heaps, refuse or rubbish, which may be brought out of the said mines and premises near to any river, brook, or channel of water, whereby such waste or dead heaps, refuse or rubbish, may reasonably be supposed to be liable to be disturbed or carried away by floods or other natural causes; and also will build and keep in proper repair a sufficient and substantial stone wall or other fence round all the pits and shafts which may at any time during the term be open in any part of the demised premises or elsewhere for the purpose of this demise, so as effectually to prevent all access thereto by all kinds of cattle; and also will at all times during the continuance of the term keep and preserve the said mines and premises from all unnecessary injury and damage, and also all the levels, drifts, shafts, pits, sumps, watercourses, houses, erections, sheds, washing places, puddles, and other conveniences, roads and ways, in good order, repair, and condition, and in such state and condition at the end or other sooner determination of the said term deliver peaceable possession thereof; and also will lay out and expend in every two years during the said term a sum equal

to at least six pounds for each and every acre of the land comprised in this demise in working the mines on the said land, or at the option of the said lessee, his executors, administrators, and assigns, shall, during at least nine months in each year of the term, employ and keep employed not less than three men for every eighty acres of the land demised in mining upon the said land and in searching for or raising ores, and will, whenever thereunto required by the Commissioner of Crown Lands and Immigration or Inspector of Mines of the said Province, furnish him with satisfactory evidence that such sum of money has been laid out or such mining operations carried on for the objects and purposes aforesaid; and also that it shall be lawful for the holder of a lease of the run, or of any portion thereof on which the land demised may have been surveyed, to have free access at all times to any surface water or any water which such person may have procured by artificial means upon the land demised, with or without cattle, horses, sheep, and other live stock, and to use and enjoy such water for the purpose of consumption by such cattle, horses, sheep, and live stock, and generally for his own benefit, use, and advantage, as he shall think proper; that the lessee, his executors, administrators, and assigns, will observe and conform to, and hold the demised premises according to the several orders and regulations from time to time in force regulating the tenor of waste lands in South Australia for mineral purposes: Provided also, that the lease may be declared void and forfeited by order of the Supreme Court of the said Province in manner provided in said Act if default shall be made by the lessee, his executors, administrators, or assigns, in all or any of the following conditions; that is to say, if the rent be not paid in advance to the Treasurer as aforesaid, and if a sum equal to at least six pounds per acre be not expended every two years on the land demised, or at the option of the lessee, executors, administrators, or assigns, if three men for every eighty acres of the land demised be not employed for at least nine months in each year of the term of the demise in working on the land demised, and in searching for or raising ores, or if the lessee shall permit any portion of the land demised to be occupied other than for mining purposes without the permission of the Commissioner of Crown Lands and Immigration in writing: Provided also, that it shall be lawful for the Governor from time to time to resume any land demised for the purpose of making roads for public utility and convenience.

Appendix No. 39.

South Australia.

An Act, No. 14. of 1868–9, to further amend the "Waste Lands Act." [Assented to, 30th January 1869.]

Whereas it is expedient to make further provision for the future sale of waste lands of the Crown within the province of South Australia: Be it therefore enacted, by the Governor of the province of South Australia, with the advice and consent of the Legislative Council and House of Assembly of the said province, in this present Parliament assembled, as follows: Preamble.

1. The waste lands of the Crown in the said province may be conveyed and alienated by Her Majesty, or by any person or persons acting on Her behalf, or under the authority of Her Majesty, by way of sale in the manner and under the conditions herein-after provided, and subject to the regulations to be made under the authority of this Act, any law heretofore in force to the contrary notwithstanding. Lands may be alienated by sale, as provided in this Act.

2. Any waste lands of the Crown which may hereafter be offered for sale at public auction may be sold upon credit, to the extent of not more than six hundred and forty acres, to any one person being the highest bidder at such auction, on condition of such person paying, on the fall of the hammer, in ready money, an amount equal to twenty pounds per centum of the purchase money, and of making application in writing, at the time of paying such ready money, in the form set out in the first Schedule to this Act, for a credit of four years for the payment of the whole amount of the purchase money; and when such payment in ready money, and application as aforesaid, shall have been made, the money so paid shall be deemed to be and shall be regarded as a payment in advance of all interest upon such purchase money, and a receipt shall be given for such payment in the form set out in the second Schedule to this Act to the person paying such money; and every such application and receipt shall be entered and registered in a public register, to be kept for that purpose in the Lands Office, and such applicant shall be deemed a purchaser of such lands upon credit in the same manner and upon the same terms as is herein provided respecting purchasers of lands in agricultural areas; and any waste lands of the Crown which may have heretofore been or which hereafter shall be offered for sale by public auction and not sold, may be sold upon the terms of credit, and upon an application as herein provided: Provided that no township or suburban lands, or special country lots, shall be sold upon terms of credit.

Lands sold at auction may be sold for four years' credit upon pre-payment of interest on purchase money, and upon application in writing.

And receipt given for payment of interest, and application and receipt to be entered and registered.

Land passed the hammer may be sold in same manner.

3. Any person who may be desirous of purchasing on credit any land which may have been offered at auction and not sold, shall apply in writing at the Land Office, in the form set out in the first Schedule to this Act, and shall indicate by reference to the

Method of purchasing on credit land that has been passed at auction.

public maps or plans, or in the manner required by the regulations under this Act, the section or sections, not being in the whole more than six hundred and forty acres, which he may wish to purchase at the price at which such lands may be open to purchase by private contract, and shall pay in advance in ready money, at the time of making such application, an amount equal to twenty pounds per centum of the purchase money offered by him in his said application, and upon payment of such amount, the money so paid shall be deemed to be and shall be regarded as a payment in advance of all interest upon the amount of the purchase money, and a receipt for such amount shall be given, in the form set out in the second Schedule to this Act, to the person making such application, and all such applications and receipts shall be entered and registered in a public register to be kept for that purpose in the Land Office.

Agricultural areas named in schedule.

4. The lands described in the third Schedule to this Act shall be agricultural areas, and shall bear the names and numbers described and set out in such Schedule.

Other areas may be surveyed, and description laid before Parliament.

5. The Governor, with the advice and consent of the Executive Council, may from time to time, by proclamation in the *South Australian Government Gazette*, set apart other agricultural areas of not less than twenty nor more than one hundred square miles in extent, in any part of the province of South Australia; and such areas shall contain good agricultural land, and shall be surveyed in sections of not more than three hundred and twenty acres; and in every such area there shall be a township and suburban lands and all proper reserves for public purposes, and plans of the land surveyed in such agricultural areas shall be prepared and kept in the Land Office: Provided that a description of the lands intended to be proclaimed as an agricultural area as aforesaid shall be laid before Parliament fourteen days at the least prior to the issue of such proclamation: Provided always, that nothing herein contained shall be taken to limit or restrain the power of the said Governor in Council to cause any township lands, suburban lands, roads, or reserves, to be surveyed and made within the said areas, in the same manner and as fully as might be done upon any part of the waste lands of the Crown before the passing of this Act.

Townships to be surveyed in each area.

Proviso: Nothing herein shall limit the Governor's existing power.

Lands in areas to be open for selection, except township lands.

6. The lands within such agricultural areas, except as is hereinafter otherwise provided as to township lands, suburban lands, and such lands as may remain unsold as herein provided, shall not be offered for sale at auction, but shall be open for selection in the manner herein provided, and on terms of credit only; and all township and suburban lands in such areas shall be sold at auction, and not upon credit.

Notice of lands being open for selection at stated prices and for certain periods to be given.

7. The lands comprised in the agricultural areas in the third Schedule to this Act shall be forthwith surveyed as herein provided, and within three calendar months from the time when any agricultural area is proclaimed, the lands in such proclaimed area shall be surveyed as herein provided, and public notice shall be given by proclamation in the *South Australian Government Gazette* that all the lands in the respective areas, except township

and suburban lands, and reserves, are open for selection at a certain price per acre, to be named in the proclamation, which shall be the value of the best land in the said area, as determined by the Governor, with the advice of the Executive Council, for a period to be named in such proclamation, and that at the expiration of such first-named period the lands remaining unsold shall be open for selection at another lower or reduced price for another period to be therein named, and so on until such price has been lowered and reduced to the price of one pound per acre; and such proclamation shall state the several periods during which and the several lower or reduced prices at which lands remaining unselected and unsold may be selected: Provided always, that such reduction of price from period to period shall never be at the rate of less than five shillings nor more than ten shillings per acre, and the periods to be named in the said proclamation, during which such lands shall be left open for selection at each separate price, shall not be less than one month nor more than three months in duration; and no land in any area shall be open for selection until one calendar month at least after the issue of such proclamation, and no land in any of the areas described in the third Schedule to this Act shall be open for selection until six calendar months after this Act shall come into operation: Provided also, that if any improvements shall have been effected on any such land, the estimated value of such improvements shall be added to the price of the land.

Proviso: Reduction of price and duration of period of selection to be limited.

8. No land shall be sold under the authority of this Act for less than one pound per acre.

No land to be sold under 1*l.* per acre.

9. After the lands in any area have remained open for sale at the price of one pound per acre for a period of two years, if any such lands remain unsold, the Governor in Council may direct that such lands or any portion of them shall be sold by public auction, in the same manner as lands not within agricultural areas.

Unselected lands may be sold by auction.

10. Whenever it is mentioned or provided in this Act that any of the said lands shall be sold upon credit, such credit shall be taken to be and be a term of credit of four years duration, and not of any greater or less duration.

Term of credit to be four years.

11. Any person who may be desirous of purchasing land within an agricultural area shall apply in writing at the Land Office, in the form set out in the fourth Schedule to this Act, and shall indicate, by reference to the public map or plan of such area, or in the manner required by the regulations under this Act, the section or contiguous sections, not being in the whole more than six hundred and forty acres, which he may wish to select, and shall pay in advance in ready money at the time of making such application an amount equal to twenty pounds per centum of the purchase money offered by him in his said application; and upon payment of such amount the money so paid shall be deemed to be and shall be regarded as a payment in advance of all interest upon the amount of purchase money, and a receipt for such amount shall be given in the form set out in the second Schedule to this Act to the person making such application, and all such

Method of obtaining land in agricultural area.

applications and receipts shall be entered and registered in a public register, to be kept for that purpose in the Land Office.

Simultaneous application to be determined by lot.

12. When on any day within the period of one half hour, calculated from the time of the opening of the office for the receipt of applications under this Act, two or more persons shall make application for the purchase of the same portion or section of land under this Act, whether such lands shall be in an agricultural area or shall be lands that have been offered at auction and not sold, the priority of the order of application shall be determined by lot, to be conducted in such manner as the regulations made under this Act may direct; and upon such determination the applications shall be received and entered in the order so ascertained, and an unsuccessful applicant shall have the money paid by him with his application returned to him.

Unsuccessful applicant may have his money returned.

Purchasers at auction or on credit, or in area, must sign agreement and may go into possession thereunder, and pay purchase money at end of four years, when land grant will be given.

13. When any person, either as a purchaser at public auction, or of lands that have been offered at auction and not sold, or of lands within an agricultural area, shall have obtained a receipt for payment of all interest in advance, as provided in the second and ninth preceding clauses of this Act, and in the form set forth in the second Schedule to this Act, he shall forthwith execute in duplicate an agreement in writing in the form set forth in the fifth Schedule to this Act, one part of which said agreement shall be retained in the Land Office, and the other part shall be delivered to the intending purchaser executing the same, who shall thereupon become the purchaser of the lands mentioned in such agreement, and shall be entitled to go into possession of and occupy the same, subject to the conditions contained in the agreement and to the provisions of this Act and the regulations made under the authority of this Act, but shall not be entitled to receive a Crown grant of the lands held by him under such agreement, before the expiration of four years from the date of such agreement; and in the event of any person neglecting or refusing to execute such agreement within forty-eight hours from the time when such receipt was given, such person shall forfeit all claim to the land and the amount for which such receipt was given.

Purchasers under agreement to have rights of possession, and as proprietors against trespassers and others.

14. Every purchaser of waste lands of the Crown, occupying the same under an agreement as herein provided, shall be entitled to maintain suits at law or in equity against any wrongdoer or trespasser, as effectually as he could under a grant from the Crown, provided that such agreement has not become forfeited or void by reason of any fraud under this Act, or any violation of this Act, or of the regulations made under this Act, or of any of the conditions contained in such agreement.

No transfer of agreement except in case of death or insolvency.

15. No transfer or assignment of any agreement under the provisions of this Act shall have any force or effect, or be valid either at law or in equity, and any transfer or assignment, or any attempt to make any such transfer or assignment, shall be deemed a fraud under this Act: Provided, however, that on any application for a transfer of the agreement by an original purchaser from the Crown, on whom continued occupation may inflict a personal hardship, or be the occasion of great loss, or by the executors,

administrators, devisee, or assignee, or trustee in insolvency of the original purchaser from the Crown, to any person to be named in such application, the Commissioner of Crown Lands may, upon being satisfied that the claim to such transfer has been equitably and justly established, and upon being satisfied that the person so named is a suitable person, grant a transfer of the agreement, and an order to that effect may issue to the party so applying in the form contained in the sixth Schedule to this Act: Provided no transfer from any such original purchaser from the Crown shall be made until after such application, and the reasons assigned by the applicant for desiring such transfer, shall have been published in the *Government Gazette* for at least one calendar month, and the Governor in Council shall have approved of such transfer: Provided that no transfer shall have any effect whatever until the transferee shall have endorsed and agreed to become bound by the terms of such agreement.

At the end of four years purchaser to pay his purchase money if he has not forfeited his agreement by committing fraud, or any breach of his agreement.

16. Within seven days from the termination of four years from the date of any agreement under which any person shall have become a purchaser of waste lands under this Act, but not sooner than the termination of four years from the date of any such agreement, such purchaser shall be entitled to pay, and shall pay to the Treasurer the whole amount of the purchase money mentioned in such agreement, but shall not be permitted at any time to pay any part or instalment thereof; and upon making such payment he shall be entitled to receive a grant from the Crown in fee simple, conveying to him the lands held under such agreement: Provided always, that at the time of making such payment the said agreement shall not have been forfeited or rendered void by reason of any fraud under this Act, or any violation of this Act, or of the regulations made under this Act, or of any of the conditions contained in such agreement.

Extent to which lands may be held on terms of credit.

17. No person shall be entitled to hold upon credit under any agreement or agreements, whether he be a purchaser at auction, or by application for lands that have been offered at auction and not sold, or for lands in any agricultural area, more than six hundred and forty acres of land altogether at any one time, and all lands so held upon credit by any one person shall be in and shall form one block, and no *infant or* married woman, except a married woman who has obtained a decree for judicial separation, binding according to the laws in force in South Australia, shall be entitled to hold, either directly or otherwise, any such land upon credit under any such agreement.

No agent to buy in his own name for another.

18. No person, being an applicant for the purchase of any lands on credit, shall become the purchaser of the same who is in respect of such lands or any part thereof an agent, servant, or trustee of or for any other person, or who at the time of his application has entered into any agreement to permit any other person to acquire by purchase or otherwise the lands in respect of which such application is made or any part thereof, or the applicant's interest therein: and all the land applied for under this Act shall be so applied for *bonâ fide* for the use and benefit of the applicant in his own proper person, and not as agent, servant, or trustee for any

Nothing shall prevent *bonâ fide* applicant employing agent to buy in applicant's name. Certain contracts to be void.

other person: Provided that nothing herein shall prevent any *bonâ fide* applicant from employing an agent duly authorized to make application in the name and for the declared use and benefit of such applicant; and all contracts, agreements, and securities which shall be entered into, made, or given with the intent of violating or evading any of the provisions of this Act, shall be and are hereby declared to be a fraud under this Act, and between all the parties thereto, illegal, and absolutely void at law and in equity.

And such agreement fraudulent and void.

19. If any person shall become the purchaser of any lands, in violation of any of the provisions of this Act, under an agreement as herein-before provided, the same shall be a fraud under this Act, and such agreement shall be forfeited and void; and if at any time, while an agreement is in force, it shall be shown, to the satisfaction of the Governor in Council, that any purchaser who occupies any lands on agreement has been guilty of fraud under this Act, or has violated any of the conditions of his agreement, the said Governor may revoke such agreement, and resume the land therein mentioned, and dispose of it as if such agreement had never been made; and no claim in equity under such agreement shall be pleadable in any Court against such revocation and resumption of such lands, but such purchaser shall be taken to have forfeited all rights, title, and interest under such agreement, and to be, as against the Governor in Council, or the Commissioner of Crown Lands, or any person claiming under the Crown, a mere trespasser; and the production of a copy of the *South Australian Government Gazette*, containing a notice signed by the Commissioner of Crown Lands, of the revocation or forfeiture of any agreement, shall be conclusive evidence that such agreement has been lawfully revoked or forfeited, as the case may be: Provided that no such revocation or forfeiture of any such agreement shall be valid unless one month's notice shall have been first served upon such purchaser or published in the *Government Gazette*, and such purchaser may be heard in his defence before such tribunal as the Governor in Council may appoint.

And in certain cases Governor may annul such agreements.

Any unauthorized occupier under a forfeited agreement may be forcibly dispossessed.

20. When any person shall occupy any waste lands of the Crown under any agreement which has expired or become forfeited or has been revoked under this Act, or in virtue or under colour of any void or forfeited or revoked agreement, or shall remain in unauthorized occupation of such lands, and refuse or neglect to deliver up possession of the same, any person authorized by the Commissioner of Crown Lands may apply, upon an information to be laid by him in the form set out in the seventh Schedule to this Act, to any Justice of the Peace for the said Province for a summons in the form set forth in the eighth Schedule to this Act, calling upon the occupier of such lands to appear, at a time and place to be therein specified, before a Special Magistrate or any two or more Justices of the Peace, who may hear and determine the matter of such information in a summary way notwithstanding any question of title that may be raised, and upon proof, to the satisfaction of the said Special Magistrate or Justices who may hear the complaint at the time and place so specified, that

the lands referred to in such summons are held under an agreement which has become forfeited and void, or has been revoked, and that such lands are in the unauthorized occupation of the person summoned, a warrant shall be issued by the said Special Magistrate or Justices, to be in the form or as near as may be in the form contained in the ninth Schedule to this Act ; and every constable or bailiff to whom such warrant is directed may forthwith execute the same according to the tenor and exigency thereof in the same manner as any warrant of possession or writ of *habere facias possessionem* may now be executed by virtue of any law existing at the present time in the said Province : Provided always, that the jurisdiction of such Special Magistrate or Justices shall not be taken away or deemed to be ousted by any claim of title, question of property, or suggestion of right, whether made *bonâ fide* or otherwise, which may be raised by the occupant at any such hearing as aforesaid, but all matters relevant to and arising out of the information laid as aforesaid shall be heard and finally determined by such Special Magistrates and Justices.

Forfeited lands may be re-sold in manner to be declared by Governor in Council.

21. Whenever any purchaser on credit of lands in any area, or of any lands which may have been offered at auction and not sold, or of any lands sold at auction, or held under any agreement, shall have forfeited his rights to such land, and whenever any person holding any land under an agreement, as provided in this Act, shall have forfeited his interest therein by the revocation of such agreement under any of the provisions of this Act, or under the regulations to be made under this Act, or under the conditions of any such agreement, the Governor in Council may order the sale of such forfeited lands at public auction for ready money or upon credit.

Proceedings to be taken to be under the Justices Act, 1850.

22. Every proceeding under this Act for the recovery of the possession of any of the waste lands of the Crown, as aforesaid, where no other method of proceeding is by this Act provided, shall, subject to the provisions of this Act, be had and taken, and all informations and summonses under this Act may be heard and determined, in a summary way by a Special Magistrate, or two Justices, under the provisions of an Ordinance of the Governor and Legislative Council, No. 6. of 1850, "To facilitate the performance of the duties of Justices of the Peace out of Sessions, with respect to summary convictions and orders," or of any Act hereafter to be in force relating to the duties of Justices with respect to summary orders ; and all orders under this Act may be enforced as in the said Ordinance, or in any other Act, is or shall be provided ; and no order or proceeding of any Special Magistrate, or Justices, made under the authority of this Act, shall be appealed against, or removed by *certiorari*, or otherwise, into the Supreme Court of the said Province.

Regulations may be made.

23. The manner in which all sales of waste lands shall be conducted and the times when the same shall take place, and all other matters relating to the conduct and management of such sales in accordance with the provisions of this Act, and of every Act in force in the said Province relating to sales of waste lands, may be fixed and determined by the Governor, with the advice and consent

of the Executive Council; and the Governor, by and with the advice aforesaid, may make and publish such regulations as to him shall seem meet, for carrying out the objects, purposes, and provisions of the said Acts; and may from time to time rescind, alter, and amend the same, and make other regulations in lieu thereof for carrying out more fully such objects, purposes, and provisions; and every regulation, when published in the *South Australian Government Gazette*, shall have the force of law: Provided that a copy of all regulations, made under the authority of this Act, shall be laid before Parliament within fourteen days from the publication thereof, if the Parliament shall be then sitting, and if the Parliament shall not be then sitting, then within fourteen days from its next sitting for the dispatch of business.

False declaration a misdemeanor.

24. Solemn declarations, which shall to all intents and for all purposes have the same force and effect as statutory declarations have by law at the present time, and the declarations in the first and fourth Schedules to this Act, may be made and declared under this Act, before the Commissioner of Crown Lands, the Surveyor-General, or such other person as the Governor in Council may appoint under this Act for that purpose, and if any person wilfully make any false statement in any declaration made in pursuance of this Act, he shall be guilty of a misdemeanor, and shall be punishable as if guilty of wilful and corrupt perjury.

Proclamation of provisions with respect to credit.

25. The provisions of this Act, in respect to purchase of land upon credit, shall come into operation on a day to be fixed by the Governor by proclamation in the *South Australian Government Gazette*, such day not being less than fourteen days nor more than forty-two days after this Act shall have been assented to by the Governor on behalf of Her Majesty.

Title of Act.

26. This Act shall be cited as "The Waste Lands Amendment Act, 1868–9," and, except so far as the same shall be inconsistent therewith, shall be read together with and as part of the "Waste Lands Act."

In the name and on the behalf of the Queen, I hereby assent to this Act.

F. Hamley,
Governor.

SCHEDULES referred to.

First Schedule.

Application to purchase on credit.

I, the undersigned, being the highest bidder at auction for the following lands, (or applicant for the following lands that have been offered at auction and not sold), namely :—

in the hundred of and the county of ;
hereby apply to become the purchaser of such lands under the provisions of "The Waste Lands Amendment Act, 1868–9," upon a four years' credit for the payment of the purchase money or sum of pounds shillings offered and bid by me this day, and I herewith tender and pay the sum of , as and for four years' interest in advance upon such purchase money, and undertake to sign, within forty-eight hours, an agreement in writing in the terms and in the form provided by the said Act. And I do hereby solemnly and sincerely declare that I am not at the present time a purchaser of Crown lands upon credit to such an extent as will render my present application illegal under the said Act, by making the total amount of acres purchased by me from the Crown, upon credit, exceed the quantity of 640 acres, and that I am above the age of twenty-one years, [and (*if the applicant is a female*) that I am not a married woman, *or* that I am a married woman and have obtained a judicial separation,] and that I apply for such land on my own behalf and for my own use, and not as an agent or trustee for any other person whatsoever.

Dated this day of , 186 .

(*Signature.*)
(*Occupation.*)
(*Address.*)

Declared and signed before me,

Second Schedule.

Form of Receipt for payment of interest in advance upon purchase money.

Received this day from the sum of pounds, being four years' interest in advance upon the purchase money offered or bid by him for acres of land situate in

in the hundred of and the county of ,
for the purchase whereof an agreement is to be entered into within forty-eight hours from the time when this receipt is given, in accordance with the clause of "The Waste Lands Amendment Act, 1868–9."

Dated this day of , 18 .

(*Signature of Commissioner of Crown Lands or officer appointed by him.*)

Third Schedule.

The following shall be agricultural areas under this Act :—

Area No. 1.—Mount Muirhead.

Commencing at the south-western corner of the hundred of Hindmarsh; thence north, by the western boundary of the said hundred and its production for a distance of eight miles; thence true west, for a distance of about ten miles; thence true south, for a distance of about two miles; thence, in a south-easterly direction, by a straight line to the south-western corner of the hundred of Hindmarsh, the point of commencement.

Area No. 2.—Narracoorte.

Commencing at the intersection of the main line of road from Narracoorte to Penola, with the south boundary of the hundred of Narracoorte; thence west, by the south boundary of the said hundred, to the south-east corner of section 455; thence, in a north-easterly, north-westerly, and northerly direction, by the eastern boundaries of sections 455, 462, 470, 471, 480, and north-eastern boundaries of sections 480, 149, 148, 147, 145, 144, and by the eastern boundary of Garey's Swamp, to its intersection with the north boundary of the hundred of Narracoorte; thence, in a north-westerly direction, at a tangent to the south-western boundary of Clay Lake, to a point on the north boundary of hundred No. 32, about three miles west of its north-east corner; thence east, by the north boundaries of hundreds Nos. 32 and 31, to a point about one mile east of the north-west corner of the latter hundred; thence, in a south-easterly direction, to the south-eastern corner of section 90; thence, at the same bearing, in a direct line with the eastern extremity of the township of Narracoorte, for a distance of about six and three-quarter miles; thence true east, to a point north of the north-east corner of section 8; thence south, to north-east corner of said section; thence south, to the south-east corner of section 369; thence southerly, to the eastern corner of section 375; thence south-westerly, by the southern boundaries of sections 375, 374, 379, 378, and the production of the south boundary of the latter section, to the main line of road from Narracoorte to Penola; thence south-easterly, by the said road, to the southern boundary of the hundred of Narracoorte, the point of commencement.

Area No. 3.—Gulnare.

Commencing at the south-eastern corner of hundred No. 6, in the county of Victoria; and running thence north, by the eastern boundary of the said hundred, for about three and three-quarter miles; thence west, to Mount Misery; thence, in a northerly direction, to the south-eastern corner of section 72, in hundred No. 5; thence true north, to a point true east of Yangya Hill; thence, true west, passing over the said hill, to the western boundary of the said hundred; thence southerly, by the western boundaries of hundreds Nos. 5 and 6, to the south-western corner of the latter hundred; thence east, by the south boundary of the said hundred, to its south-east corner, the point of commencement.

Area No. 4.—Broughton.

Commencing at the point of intersection of Runs Nos. 58, 131, and 395, and running thence true west for about ten and a half miles; thence true north, to its intersection with the north boundary of the county of Stanley; thence east, by the said county boundary, for about six and a

quarter miles; thence, in a south-easterly direction, to the point of commencement.

Area No. 5.—Troubridge.

Commencing at a point on the eastern boundary of hundred No. 1, Yorke's Peninsula, eight miles north of its south-eastern corner; thence, true east, to the sea coast; thence, southerly, south-westerly, and westerly, by the sea coast, to the south-east corner of hundred No. 1; thence north, by the eastern boundary of said hundred, to the point of commencement.

Area No. 6.—Warrow.

Bounded on the east by a line (one mile true east of Warrow Head station), running true south, from the north boundary of hundred No. 37, for a distance of about six and a half miles; thence true west, for a distance of about two and three quarter miles; thence true north, to the southern shore of Lake Greenly; thence, easterly and northerly, by the south-eastern shore of said lake, to its intersection with the north boundary of hundred No. 37; thence east, by the north boundary of said hundred, to the point of commencement.

FOURTH SCHEDULE.

Application for selection in agricultural area.

I, the undersigned, do hereby apply to become the selector of section in the agricultural area of , or of the lands situate in

and to become the purchaser thereof under the provisions of "The Waste Lands Amendment Act, 1868-9," at the price or sum named in the public notice respecting such lands, dated the day of , for the price or sum of , upon a term of four years' credit for the payment of such purchase money, and I herewith tender and pay the sum of as and for four years' interest in advance upon such purchase money, and undertake to sign, within forty-eight hours, an agreement in writing in the terms and in the form provided by the said Act. And I do solemnly and sincerely declare that I am not at the present time a purchaser of Crown lands upon credit to such an extent as will render my present application illegal under the said Act, by making the total amount of acres purchased by me from the Crown upon credit exceed the quantity of 640 acres, and that I am above the age of twenty-one years, [and (*if the applicant is a female*) that I am not a married woman, *or* that I am a married woman and have obtained a judicial separation,] and that I apply for such land on my own behalf, and for my own use and benefit, and not as an agent or trustee for any other person whatsoever.

Dated this day of , 18 .

(*Signature.*)
(*Occupation.*)
(*Address.*)

Declared and signed before me,

Fifth Schedule.

Form of agreement of sale and purchase on credit.

No.

Memorandum of agreement made the day of , between , acting on behalf of His Excellency the Governor-in-Chief of the Province of South Australia, herein-after called the vendor, of the one part, and of herein-after called the purchaser, of the other part: It is hereby agreed between the parties hereto, that the vendor shall sell, and the purchaser shall purchase, all that piece of land, being in fee simple at the price of £ , to be paid on the day of , upon the following terms and conditions :—

1. The purchaser shall not pay any interest upon the amount of such purchase money beyond the amount already paid by him in advance.

2. The purchaser shall pay on the said day of , or within seven days thereafter, the said purchase money in full, and shall then receive a land grant conveying the above-described lands to him in fee simple.

3. The purchaser shall take possession of the said land within six months from the date hereof, and shall continue to occupy the same during the term of this agreement, and after the first twelve months shall continue to reside on the same.

4. The purchaser shall make substantial and permanent improvements upon the said land during the said term to the satisfaction of the Governor in Council, and to the extent of—

During the first year, five shillings per acre.
During the second year, two shillings and sixpence per acre.
During the third year, two shillings and sixpence per acre.
During the fourth year, two shillings and sixpence per acre.

5. The purchaser's improvements in the last preceding condition referred to may consist of a dwelling-house, farm buildings, wells, or reservoirs of water, and fences, and no other kind of erection or outlay upon the land shall come within the meaning of the last preceding condition.

6. Any person authorized by the said vendor may, at all reasonable times, enter upon the said lands to view the said lands and any improvements thereon.

7. The purchaser shall not, at any time during the term of four years, assign, transfer, or make over, or attempt so to do, the said lands or his rights under this agreement, nor shall he grant any lease or other tenancy of or over the said land.

8. Upon any breach of the foregoing conditions, the purchaser shall forfeit all benefit under this agreement, and shall deliver up to the said vendor, or whomsoever he may appoint, the said lands with all improvements thereon. And this agreement shall become void, and the purchaser may be dealt with under "The Waste Lands Amendment Act, 1868-9," as a person in unauthorized occupation of such lands so long as he continues to occupy the same.

In witness, &c.

(*Signatures*) , Vendor.
, Purchaser.

Sixth Schedule.

Transfer of Agreement.

It having been satisfactorily shown to me that , the original purchaser of sections , under an agreement dated the day of , 18 , has died [*or* become insolvent], and that are the legal claimants to his interest in such agreement as his executors [*or* representatives, *or* devisees, *or* assignees, *or* trustees in insolvency, *as the case may be*], and the said legal claimants having named as a suitable person to become a transferee of the said agreement, I hereby authorize and grant a transfer of the said agreement to the said , and make over to him [ ] all rights and benefits thereunder, on condition that he [ ] endorse the said agreement, and adopt the conditions thereof, and become bound thereby, as aforesaid, as far as may be, and as fully as the said was bound previous to his death [*or* insolvency].

Dated this day of , 18 .

(*Signatures.*)

Seventh Schedule.

Form of information and complaint against unauthorized occupation of waste lands of the Crown.

South Australia, } The information and complaint of A.B.,
to wit. }

on behalf of the Commissioner of Crown Lands, taken this day of in the year of our Lord 18 , before the undersigned, one of Her Majesty's justices of the peace in and for the province of South Australia, who saith that C.D., of is the unauthorized occupant of certain waste lands of the Crown, situate at held by him under an agreement bearing date the day of 18 , which said agreement has been forfeited by the said C.D., under the provisions of "The Waste Lands Amendment Act, 1868–9."

Sworn before me the day and year first above mentioned, at

J.S.

Eighth Schedule.

Form of summons to dispossess unauthorized occupant.

South Australia, }
to wit. }

In the matter of "The Waste Lands Amendment Act, 1868–9," and between the Commissioner of Crown Lands, complainant, and

occupant.

You are hereby summoned to appear to the complaint of the Commissioner of Crown Lands on the day of , before us on the day of , at o'clock in the forenoon,

to answer the complaint that you are in the unauthorized and illegal occupation of certain waste lands of the Crown, to wit—

and that you neglect and refuse to deliver up possession of the same.
Dated the 18 .

[N.B.—See notice on back.]

In case you fail to attend this summons, upon proof of reasonable notice to you of the same, the complaint will be heard in your absence, and such order made as to the said justices shall seem fit.

Ninth Schedule.

Form of warrant to dispossess unauthorized occupant.

South Australia, }
to wit. }

In the matter of the "Waste Lands Amendment Act, 1868–9," and between the Commissioner of Crown Lands, complainant, and A.B., occupant.

To , the bailiff of

and all constables and peace officers. Whereas it has been made to appear to us, and we have adjudged that the said A.B. is in the unauthorized and illegal occupation of (*here state description of lands*)

These are therefore to require you, the said and others, to deliver peaceable and quiet possession of the said land and premises to the said complainant, and eject the said A.B., and all other persons therefrom, and for which this shall be a sufficient warrant.

(Signed by a special magistrate, or two justices) this day of

Appendix No. 40.

Labuan Mines, &c.

Lease betwixt Her Majesty Queen Victoria and the Oriental Coal Company (Limited).

This Indenture, made the eleventh day of March eighteen hundred and sixty-nine, between Her Most Gracious Majesty Queen Victoria of the one part, and the Oriental Coal Company (Limited), registered under the Companies Acts, 1862 and 1867 on 1st April 1868 (herein-after referred to as the said Company), of the other part.

Narrative.

Whereas by an indenture made the thirtieth day of April eighteen hundred and sixty-four, between Her said Majesty of the first part, Sir James Dalrymple Horn Elphinstone, Baronet, and James Thomson Mackenzie, Esquire, of the second part, and the Labuan Coal Company (Limited) of the third part, Her said Majesty did demise and lease unto the said Labuan Coal Company, their successors and assigns, all coal mines, beds, seams, and strata of coal in the Island of Labuan (except as therein is excepted), for the term of twenty-one years, from the 25th day of December 1863, subject to the stipulation therein contained, and for payment of the royalty therein mentioned; but all mines, ores, and minerals other than coal were reserved unto Her Majesty and excepted from the said lease: And whereas by an indenture made the 5th day of April 1866, between the said Labuan Coal Company (Limited) on the one part, and the China Steam Ship Company (Limited) of the other part, all the estate, right, title, interest, and privileges of the said Labuan Coal Company, in and under the said indenture of lease, and in the coal and property thereby demised, were vested in the China Steam Ship and Labuan Coal Company (Limited), subject to the payment of the royalties, and the performance and observance of the covenants, stipulations, and conditions in the said recited indenture of lease, on the lessee's part, to be paid, performed, and observed: And whereas by an indenture made the 5th day of April 1866, between Her said Majesty and the said China Steam Ship and Labuan Coal Company (Limited), Her Majesty made certain new provisions in regard to the aforesaid lease; and especially Her said Majesty thereby granted unto the said amalgamated Company full right to get, raise, work, appropriate, and dispose of during the continuance of said lease, all ironstone, iron ore, fireclay, and freestone; and also all petroleum or other mineral oils that might be discovered by them in or upon all lands in the said Island of Labuan to which they had right to raise and get coal, subject to the rent, royalties, reservations, and stipulations in the said indenture contained.

Lease of April 30, 1864.

Assignation to China Steam Ship Company.

Lease of April 5, 1866.

And whereas all the estate, title, rights, and privileges of the China Steam Ship and Labuan Coal Company (Limited,) (which Company has been wound up under the supervision of the High

Transfer to Oriental Coal Company.

Court of Chancery,) became legally vested in the said Oriental Coal Company (Limited), as from the 15th day of May 1868, subject to the rents, royalties, costs, and stipulations in the said herein-before recited indentures of lease of the 30th day of April 1864 and the 5th day of April 1866 respectively contained:

And whereas the said Oriental Coal Company (Limited), in order to enable them the better to develop their operations, have made application to Her said Majesty to substitute for the existing lease for twenty-one years a new lease for forty-two years, containing the terms and conditions herein-after mentioned:

And whereas Her said Majesty hath been graciously pleased to accede to such application, and in furtherance thereof the said herein-before recited indentures of lease of the 30th day of April 1864 and the 5th day of April 1866 have been duly given up and cancelled.

Now Her Majesty lets to the Oriental Coal Company (Limited)

Now this indenture witnesseth, that in consideration of the several rents and royalties herein-after reserved and made payable, and of the covenants, provisoes, conditions, and declarations herein-after contained, on the part of the said Company, to be paid, observed, and performed, Her said Majesty Queen Victoria doth hereby, for Herself, Her heirs and successors, grant, demise, and lease unto the said Oriental Coal Company (Limited), their successors and assigns, all and singular the mines and pits of coal, as well already opened as hereafter, during the term of years hereby created, to be opened; and all and singular the beds, seams, measures, and strata of coal lying, or which may be sought for, found, dug, won, or gotten in, under, or out of all the land or lands and hereditaments whatsoever of and in the Island of Labuan other than, and except nevertheless, such parcels or lots of public land in the said Island as were previously to the 25th December 1860 granted and appropriated by Her Majesty to any private individuals; together with full and free liberty, power, and authority to and for the said Company and their assigns to enter into and upon all such, and all such part and parts of the lands or land in the said Island of Labuan (not being, and except nevertheless, lands so granted and appropriated by Her Majesty previous to the said 25th day of December 1860 as aforesaid, and not being, and except lands already reserved or appropriated, or which shall during the term of years hereby created be reserved or appropriated out of any of the now unappropriated Crown lands in the said Island by Her Majesty or Her successors, for buildings, town sites, streets, roads, wharves, or quays, or for any other public purposes whatsoever, and not being, and except messuages, buildings, factories, yards, gardens, pleasure grounds, or roads in or upon any lands in the said island, the service whereof shall, during the term of years hereby created, be sold and disposed of by Her Majesty or Her successors, under the Government Land Regulations for the time being in force in the said Island, to any private individuals or public body): And Her said Majesty doth hereby also grant unto the said Company, their successors and assigns, subject to

The coal in the Island of Labuan,

Excepting public lands granted before 1860.

Power to enter upon lands.

Under certain exceptions.

the royalties and stipulations herein-after contained, full right to get, raise, work, appropriate, and dispose of for their own use and benefit during the continuance of the period hereby created, all ironstone, iron ore, fireclay, and freestone, and also all petroleum or other mineral oils that may be discovered by the said Company in, upon, or under lands in the said Island of Labuan, excepting as aforesaid ; together also with full and free liberty, power, and authority to and for the said Company and their assigns to occupy so much and such part and parts of all and singular the lands or land in the said Island (other than and except as herein-before excepted) as may be necessary or convenient for the working or carrying on of the working of the said mines, or the searching for, digging, winning, or getting, stacking, storing, at or near the pit's mouth ; using, carrying away, or disposing of all or any of the coal and beds, seams, measures, and strata of coal; and all ironstone, iron ore, fireclay, and freestone ; and all petroleum or other mineral oils hereby demised, as well as for distilling or refining such oils, the said Company or their assigns first giving two calendar months' notice in writing, under the hand of some agent of the said Company in the said Island, to the owner or owners (if any), or person or persons (if any), for the time being in lawful possession of any such of the said lands, which by these presents the said Company are authorized to enter upon for the purposes aforesaid, as shall be at the time of such notice the property of any private person or public body, by leaving such notice for such owner or owners, person or persons, at his, her, or their usual place of abode in the said Island, and specifying in every such notice the particulars and quantity of land intended to be entered upon and taken possession of by the said Company or their assigns, and first agreeing with the said owner or owners, person or persons, for such entry ; and making reasonable compensation to him, her, or them for all injury and damage to be done to the crops then standing and growing upon the lands and premises so entered upon, and for any other loss or damage, whether immediate or consequential, to be sustained by such owner or owners, person or persons, by reason of such entry and taking possession ; or in case of such owner or owners, person or persons, not assenting to such entry, or not agreeing as to the amount of compensation to be paid by the said Company or their assigns, as last aforesaid, then paying to such owner or owners, person or persons, such compensation as shall be assessed and settled by the Governor or Chief Officer of Government in the said Island for the time being, on the requisition of either party ; And also, together with full and free liberty, power, and authority to and for the said Company and their assigns to make, construct, and set up, repair, and maintain, and, subject to the provisions and stipulations herein-after in that behalf contained, to take down, remove, use, employ, and work all such messuages, houses, and buildings, and all such engines, gins, and other machinery and erections, roads, tramways, railways, staiths, wharves, jetties, loading places, and other works and conveniences whatsoever, upon all or any of the lands in the

Grant of ironstone, iron ore, fireclay, petroleum, or other mineral oil.

Power to occupy lands,

For working,

Storing,

Refining oil,

After two months' notice to owner,

And making reasonable compensation,

To be fixed, in case of need, by Governor.

Power to construct and remove works, &c.

said Island, into and upon which the said Company and their assigns are herein-before authorized to enter, or any part or parts thereof respectively, and to open, sink, drive, work, and make such pits, shafts, adits, canals, watercourses, fences, soughs, tunnels, drains, ways, paths, passages, and, subject as aforesaid, such roads, tramways, and railways, and to place, stack up, and lay the coal, oil, and minerals before specified, and also the earth, rubbish, and spoil out of the said mines, pits, and shafts aforesaid in and upon the same lands respectively, or in or upon any part or parts thereof respectively, as shall by the said Company or their assigns be deemed requisite or expedient for the purpose of working the said coal and mines, and searching for, getting, winning, raising, stacking, storing, carrying away, and disposing of the same and the produce thereof, and for the purpose of burning coke from the coal gotten within the said Island as aforesaid; provided that the stacking and storing coals and the burning of coke shall take place and be effected only at or near the pit's month or place where the coal may be raised, or otherwise on lands to be purchased or rented by the said Company or their assigns, under the stipulations herein-after contained; And also, with full liberty, power, and authority to dig, work, mine, search for, win, get, and raise all and singular the said mines, pits, beds, seams, measures, and strata of coal and iron ore, freestone, and other minerals and substances as aforesaid; and for that purpose to bore, delve, tunnel, drive, and construct headways, adits, levels, and drains, and to construct and carry on works below and under any lands in the said Island of Labuan, not being lands which, previously to the said 25th December 1860, were granted by the Crown to private individuals as aforesaid; And to use all reasonable and proper means as shall be found necessary or expedient for raising, working, getting, and smelting, refining, and manufacturing the said mines, seams, beds, and coal, and the said ironstone, iron ore, and petroleum and other oils, and for draining, raising, and discharging the water from said mines, and generally to do and perform all such acts, matters, and things as may be requisite or necessary to be done and performed in, upon, and under the lands respectively aforesaid, for the purpose of searching for, getting, winning, consuming, carrying away, converting, and disposing of the produce of the said mines and premises hereby demised, to the greatest advantage; except, and always reserving unto Her said Majesty, and Her successors and assigns, all and all manner of mines, ores, and minerals other than coal in, upon, or under the lands in the said Island, with power and authority to search for and work the same as She or they may think proper; And except and reserving unto Her said Majesty and Her successors, and, on Her and their behalf, unto the Governor or Chief Officer of the Crown in the said Island, and unto Her, their, or his miners, servants, workmen, agents, and surveyors, and other persons authorized by Her said Majesty or Her successors, or by such Governor or Chief Officer as aforesaid, good right and authority from time to time, and at all seasonable and proper

To stack coal, &c.

To burn coke, But only near pit's mouth.

Power to mine, &c.

And use all reasonable means for working mines, &c.

Except all minerals other than coal, these being reserved.

Power to Governor to enter the lands and pits,

times, to enter into and upon the premises herein-before described and demised; and to go down into and return out of all or any of the mines, pits, shafts, and works now opened, sunk, or made, or hereafter to be opened, sunk, or made, by or on behalf of the said Company or their assigns, in any part of the said lands and premises respectively (nevertheless, other than and not being upon, within, or under any lands in the said Island which the said Company have already purchased or acquired absolutely, or which the said Company or their assigns may and shall hereafter, during the said term hereby granted, purchase or otherwise acquire absolutely, under the proviso as to the purchase of unappropriated lands by the said Company or their assigns hereinafter contained or otherwise), and to go through, survey, examine, and inspect the state and condition of the said mines and works, and to do all such acts as may be necessary in order to ascertain the direction and extent of the working thereof, and the quantity of coal and other produce gotten thereout: Provided nevertheless, that nothing herein contained shall confer, or be deemed to confer, on the said Company any exclusive right or title to the ironstone, iron ore, fireclay, freestone, petroleum or other mineral oils in the said Island, or to get, work, or dispose of the same, but that the right of Her said Majesty and Her successors to dispose of the same respectively, as She or they may think fit, to or in favour of any other person or persons, company or companies, or body corporate, shall, notwithstanding these presents, remain unfettered and in full force, save only as to such of the said articles as shall, at the time of making any future grant or grants thereof by Her said Majesty or Her successors, have been actually gotten and appropriated by the said Company, or shall be in, upon, or under any mine, quarry, spot or spots of land then actually occupied and being effectively worked by the said Company: And this indenture further witnesseth, that, without prejudice to the right of Her Majesty and Her successors to grant the like power and privilege to any other persons or person, company or companies, it shall be lawful for the said Company at all times during the continuance of this present lease (the consent in writing of the Governor or Chief Officer for the time being administering the government of the said Island being first obtained) to fell or cut down, carry away, and dispose of for their own benefit, and for any purpose whatever, and without making payment for the same, any timber or trees which may be growing upon any of the unappropriated Crown lands in the said Island; provided that the said Company shall at the same time also cut down and clear away all jungle and underwood which may be growing on the land from which such timber may be cut, and shall continuously and constantly thereafter keep such land free and clear of all jungle and underwood, and for that purpose may cultivate and use such land and make the same useful and profitable, but without thereby acquiring any right or title to such land, and until the same or any part thereof may be required by the Colonial Government for any purpose; And in default thereof, the said Company shall pay to the Colonial Land and Emigration Commissioners at their

And to survey and examine.

Power reserved to Her Majesty to dispose of other mineral.

Power to lessees to fell timber.

Land thereafter to be kept clear.

In default, to pay threepence per acre per month.

office in London, or to such other person or persons as shall be appointed by one of Her Majesty's Secretaries of State to receive the same, the sum of threepence per month for each acre of land from which timber shall have been cut, but which shall not have been cleared and kept cleared of jungle and underwood as aforesaid; to have, hold, use, and enjoy all and singular the mines, beds, seams, and strata of coal, ironstone, iron ore, and freestone, and all other the premises herein-before expressed to be hereby demised, and to exercise and enjoy all and singular the powers, authorities, liberties, and licences hereby respectively granted unto the said Oriental Coal Company (Limited), their successors and assigns, from the 25th day of December 1868, for the term of forty-two years thence next ensuing, and fully to be complete and ended; but reserving to Her said Majesty and Her successors power to determine this lease in manner herein-after mentioned; yielding and paying therefor, by half-yearly payments as herein-after mentioned, during the said term unto Her said Majesty's Colonial Land and Emigration Commissioners for the time being, at their office in London, for and on behalf of Her said Majesty and Her successors, or to such other person or persons as one of the Principal Secretaries of State for the time being of Her said Majesty or Her successors shall from time to time appoint in writing to receive the same, the several royalties, rents, and sums of money following; (that is to say,) from the commencement of the term hereby granted to the 25th day of December 1870, the sum of 6*d.* sterling for each and every ton, Newcastle measure, of all coal, not being slack or screenings, raised and sold by the said Company; And from and after the said 25th day of December 1870, a minimum yearly sum payable half-yearly, as herein-after mentioned, of 1,000*l.*, together with a further sum of 6*d.* for every ton over and above 40,000 tons of such coal which may have been raised and sold by the said Company in each year during the continuance of this lease; provided, nevertheless, that there shall be deducted from the said yearly rent of 1,000*l.* an allowance or drawback of sixpence per ton on all coal, not being slack or screenings, supplied within the year for which such rent accrues, for the use of Her Majesty's Navy, or of any ships under charter to any department of Her Majesty's Government, or otherwise for the use of Her Majesty, pursuant to the covenant in that behalf herein-after contained; yielding and paying also as aforesaid for each and every ton of twenty cwt. of ironstone, iron ore, fireclay, or freestone which shall be smelted, manufactured, sold or disposed of in any shape for value by the said Company, the sum of fourpence sterling; and for every one hundred imperial gallons of petroleum or other mineral oil (except oil extracted from coal on which royalty shall have been paid) gotten and sold by the said Company during the whole period of this lease, the sum of two shillings and sixpence sterling; And it is hereby declared and agreed by and between Her said Majesty and the said Company, that the said rent of 1000*l.* shall be paid to such Commissioners, or other person or persons as aforesaid, by two equal half-yearly payments, on the 24th day of June and

Term of forty-two years;

Paying therefor,

Upon coal,

1,000*l.* per annum of fixed rent,

And 6*d.* per ton of lordship for every ton over 40,000, (Excluding coal supplied for Her Majesty's use).

And upon ironstone, &c., 4*d.* per ton.

And upon mineral oil, 2*s.* 6*d.* per 100 gallons.

Terms of payment.

the 25th day of December in every year ; the first of such half-yearly payments to be made on the 24th day of June 1871 ; And it is hereby further agreed and declared, that all the said royalties and sums of money herein-before reserved shall be deemed to have accrued due half-yearly on the 24th day of June and the 25th day of December in each year, and shall be paid as follows, that is to say, the royalties and sums of money which shall have accrued due on the 24th day of June shall be paid on or before the 25th day of December next following, and the royalties and sums of money which shall have accrued due on the 25th day of December shall be paid on or before the 24th day of June next following, the first of such last-mentioned half-yearly payments in respect of the half-year ending on the twenty-fourth day of June one thousand eight hundred and sixty-nine shall be made on the twenty-fifth day of December of that year, and that all such payments, whether for rents, royalties, or sums of money, shall be made without any deduction or abatement whatsoever ; And it is hereby further declared and agreed, that no royalty or rent shall be demandable or paid for any coal that shall or may from time to time be supplied by the said Company or their assigns for the use of Her Majesty's Navy, or of any ships under charter to any department of Her Majesty's Government, or otherwise for the use of Her Majesty or Her successors, pursuant to the covenant in that behalf herein-after contained ; And the said Company hereby, for themselves, their successors and assigns, covenant with Her said Majesty and Her successors in manner following ; (that is to say,) that the said Company, their successors and assigns, shall, during the term hereby granted, within thirty days after every twenty-fourth day of June and twenty-fifth day of December in every year, settle and make up full, true, and accurate accounts of all the coal, ironstone, iron ore, freestone, and petroleum and other oils which shall have been raised and gotten, melted, manufactured, and refined by the said Company or their assigns out of and from the said mines, pits, and other premises herein-before expressed to be hereby demised, within and during the half-year ending on every such twenty-fourth day of June and twenty-fifth day of December as aforesaid ; And shall well and truly pay on behalf of Her said Majesty or Her successors to the said Colonial Land and Emigration Commissioners as aforesaid, or to such person or persons as one of Her Majesty's Principal Secretaries of State shall from time to time appoint in writing to receive the same (and whose receipt and receipts it is hereby agreed and declared shall effectually discharge the said Company and their assigns), the full amount of the said several royalties, rents, and sums of money herein-before reserved and made payable on the several days and times, and in the manner herein-before mentioned and appointed for the payment thereof, and when and as the same shall respectively become due and payable, and that without any deduction or abatement thereout ; And also that the said Company or their assigns shall, half-yearly and within three calendar months next after every twenty-fourth day of June and twenty-fifth day of December during the said term,

No royalty or rent on coal for navy, &c.

Lessees to make up accounts once every year,

And to pay rents.

And to give statements of weights and quantities to Governor,

deliver unto the said Governor or Chief Officer of the Government for the time being within the said Island, a true and faithful written account in duplicate of the weights and quantities of all such coal and other minerals as the said Company or their assigns shall have raised and gotten out of the said mines and premises during the half year next preceding such twenty-fourth day of June or twenty fifth day of December respectively in every year ;

And to give explanations and information.

And that the said Company and their assigns, and also their respective agents and officers within the said Island, will from time to time, during the said term hereby granted, furnish unto the said Governor or Chief Officer for the time being, or unto Her Majesty's Principal Secretary of State for the Colonies (as the case may be), who shall or may require the same, and as and when so required, all such explanations and information as shall or may be in their respective power for enabling such Governor, or Chief Officer or Secretary of State as last aforesaid, to ascertain the truth and accuracy of such accounts as last aforesaid ;

Governor to certify accounts,

And Her said Majesty, for Herself, Her heirs and successors, hereby agrees with the said Company and their assigns, that the said Governor or other Chief Officer of Government for the time being in the said Island shall from time to time examine the accounts aforesaid, as and when they shall be rendered to him by or on behalf of the said Company or their assigns, and affix to such accounts, when so examined by him, a certificate under his hand setting forth whether the same accounts in his judgment are or are not true and correct, or, if they shall appear to him to be incorrect, in what respect they appear to him to be incorrect, and shall immediately in every case communicate to the resident manager or principal agent of the said Company, or their assigns for the time being in the said Island, a copy of such his certificate, and shall in every case also forthwith transmit the accounts so certified as aforesaid to Her Majesty's Principal Secretary of State for the Colonies ; And the said Company do hereby for themselves, their successors and assigns, further covenant with Her said Majesty and Her successors in manner following, that is to say, that they the said Company, and their successors and assigns, shall at the end or other sooner determination of the said term hereby granted, leave and deliver up all and singular the said premises herein-before expressed to be hereby demised, subject, nevertheless, to such user thereof in the meanwhile as is by these presents granted, and to the provisions as to the removal of machinery and fixtures herein-after contained ;

And communicate copy of certificate to manager.

Lessees covenant to quit at end of lease.

Mines to be worked in proper manner.

And also shall work and get the said mines and pits of coal and other the premises herein-before expressed to be hereby demised, or such part and parts thereof as shall be entered upon and worked by the said Company or their assigns at any time or times during the said term, in a proper and workmanlike manner, and without any unnecessary waste, and according to the best mode and course of working mines of the same or the like description as those already demised ; And also shall, if and when the same shall be practicable, leave substantial walls and pillars of coal to support the roofs of each coal mine and pit, and also shall not do or

Pillar to support roofs to be left.

knowingly suffer to be done any negligent or wilful act, matter, or thing which shall or may hazard or endanger the drowning or setting on fire of the mines or premises herein-before described and demised, or occasion any loss or damage thereto, but shall keep the headways, levels, and drifts for the time being clear and free, and the necessary passages for air and water for the time being clear and in good repair during the said term hereby granted, or until (in each or any case) the mine, pit, bed, or seam in question shall be worked out or abandoned; And also shall from time to time during the said term hereby granted, at their own costs and charges, erect and supply, and keep in good and substantial order and repair, serviceable, good, and correct weighing machines, and a proper and convenient house or houses for such machine or machines in and upon some convenient spot or spots in the said Island, and will cause and procure all the coal that shall be raised or gotten from and out of the said mines and premises herein-before described and demised to be brought upon and weighed by and at such machine or machines before the same shall be taken or carried away, or be consumed, converted, or disposed of; And shall also cause and procure the weights and quantities of all coal raised and gotten out of the said mines and premises to be from time to time entered in a book or books to be provided for that purpose by the said Company or their assigns, and also shall cause all such books as last aforesaid, and also accurate plans and diallings of the workings of the said mines, to be carefully kept at an office on some part of the said Island, to which office, and book or books of account, and to all entries and accounts touching or relating to the said demised mines and the produce thereof, and to which plans and diallings, the Governor or other the Chief Officer of the Government in the said Island for the time being on behalf of Her said Majesty and Her successors, and his agents or bailiffs, or any of them, shall at all seasonable times have free access, and be at liberty to inspect, cast up, and examine the same books, entries, and accounts, plans and diallings, and to take extracts from or copies of the same respectively; And also that the said Governor or other Chief Officer of the Government for the time being in the said Island, and his agents, bailiffs, workmen, or other persons employed by him for the purpose, shall at all seasonable times, during the said term hereby granted, have free access to the weighing machine or machines so to be erected and supplied as aforesaid, and make use of, prove, and at the expense of the said Company or their assigns, regulate and repair the same as often as occasion shall require, and, if he shall think fit to direct the same, to weigh, measure, and take account of all the coal and other minerals and substances that shall be raised or gotten from or out of the premises hereby demised; And also, that the said Company and their assigns shall permit such Governor or Chief Officer for the time being aforesaid, on behalf of Her said Majesty and Her successors, and his agents, bailiffs, inspectors, and surveyors, and other proper persons authorized by him, to go down into, and return out of all and

Headways, &c. to be kept free.

Lessees to keep weighing machines;

To enter weights and quantities in a book.

Plans of workings.

Governor to have access to them,

And to weighing machines.

And to enter mines, workings, &c.

every or any of the shafts, mines, pits, collieries, or works to be sunk, made, opened, or worked by or on behalf of the said Company or their assigns, under the provisions of these presents, and to enter into, go through, survey, and inspect the said mines, collieries, and works, and the state and condition thereof, and of every part thereof, and to latch, inspect, examine, and measure the workings thereof, and the quantity of the coal and other minerals and substances above specified, made, sold, consumed or converted, worked or gotten therein or thereout, and see that the same mines and every part thereof are worked and carried on in a fair, proper, and workmanlike manner, and for all or any of the purposes aforesaid from time to time, and at all seasonable times, and without requiring any satisfaction or compensation therefor by the said Company or their assigns, shall permit such Governor or other officer and his agents, bailiffs, inspectors, and surveyors, and other proper persons, authorized as aforesaid, to make use of the engines, gins, machinery, ropes, tackle, and other articles and things used and employed at, upon, or in the said mines, pits, collieries, and works, and to have the help and assistance of any of the colliers and workmen employed in or about the said mines, collieries, and works ; And also, that the said Company and their assigns shall at their own costs and charges from time to time, during the term hereby granted, supply and provide, and also keep in good order and repair, an adequate supply of suitable lighters, for the purpose of coaling any ships of Her Majesty's Navy, or under charter to any department of Her Majesty's Government, pursuant to the said covenant in that behalf hereinafter contained ; And the said Company, for themselves, their successors and assigns, hereby further covenant and agree with Her said Majesty and Her successors that the said Company and their assigns shall, during the continuance of the said term hereby granted, supply for the use of Her Majesty any coal which she may by notice in writing signified under the hand of such Governor or Chief Officer as aforesaid in the said Island, and left at the place of business or place of abode in the said Island of the said Company or their assigns, or of their resident manager or principal agent there, require for the use of any vessels or ships of Her Majesty's Navy, or of any other ships under charter to any department of Her Majesty's Government, at the rate of 1*l.* per ton, Newcastle measure, free of the said royalties, and that such coal shall be by the said Company or their assigns delivered immediately and in preference to all existing and other demands, should the same be so required by such notice ; and such coal shall be delivered, free of charge for delivery, on board any and every such vessel or ship as aforesaid which may be lying alongside of any wharf or jetty erected or to be erected in the said Island, but if the said vessel or ship shall not be lying alongside of any such wharf or jetty, then free on board of proper lighters to be supplied as aforesaid by the said Company or their assigns, and which lighters shall be placed as conveniently as may be in every case with reference to the position of the vessel or ship required

Lessees to keep lighters for loading navy coal.

Navy, &c. to have coal at 1*l.* per ton.

Free on board.

to be coaled, and so that such lighters may most conveniently be navigated or towed off to the same vessel or ship by and at the expense of Her Majesty or Her successors, or of the captain or owner of the ship or vessel requiring such coal; And it is hereby agreed and declared by Her said Majesty, that the said Governor or Chief Officer for the time being as aforesaid shall determine what shall be the reasonable rate of charge (having regard to the capital invested in and the wear and tear of such lighters, but exclusive of any question of profit,) to be paid to the said Company, or their assigns, for the use of such lighters; And the said Company hereby further covenant and agree with Her said Majesty and Her successors, that if default shall be made in the delivery of coal, according to the terms of any such notice as last aforesaid (except such neglect or default shall be occasioned by reason of there being no coal gotten, or by other inevitable cause), it shall be lawful for the said Governor or Chief Officer (subject nevertheless to the approval of the said Secretary of State for the Colonies) to require payment from the said Company or their assigns, and the said Company or their assigns will in such case pay to such Secretary of State for the time being, for the use of Her Majesty or Her successors, the sum of 2*l.* for every ton of coal in respect of the delivery of which such default shall be made; And in consideration of the premises Her said Majesty, for Herself and Her successors, hereby agrees with the said Company and their assigns as follows, (that is to say,) that Her said Majesty and Her successors will, from time to time during the continuance of the said term herein-before granted, on application made for such purpose by or on behalf of the said Company or their assigns to one of Her Majesty's Principal Secretaries of State, sell to the said Company or to their nominees or assigns, at a price not exceeding 1*l.* for an acre, and so in proportion for a less quantity than an acre, so much unappropriated rural surface land of and in the said Island of Labuan as the said Company or their nominees or assigns shall require to purchase for the erection or making of houses, buildings, erections, roads, railways, or tramways, or the depositing or storing, or for the transmit of coal, or for any other purpose necessary for or connected with the working and carrying on the said coal mines and premises herein-before described and demised, or any of them, or for or with other the business or purposes of the said Company in the said Island, or any of them, and that Her Majesty and Her successors will do and perform all acts and deeds which shall be requisite for vesting in the said Company, their nominees or assigns, the absolute interest in the surface land so to be sold to them as aforesaid: Provided always, that the land so sold shall not exceed in the whole 1,000 acres, and that it shall be selected and paid for before the first day of January 1870, and that it shall not, without the express approval of one of Her Majesty's Principal Secretaries of State, include any land on or abutting on the seashore, or on any harbour or creek, or any land which the Governor or Chief Officer of the Government in

Governor to determine hire of lighters.

Penalty of 2*l.* per ton in default.

Lessees entitled to acquire unappropriated surface land at 1*l.* per acre.

Not to exceed 1,000 acres, to be selected before Jan. 1, 1870.

Exceptions and regulations.

the said Island shall have reserved or shall think necessary to reserve for any public purpose whatever; and that the land so sold shall be taken in blocks of not less than 100 acres each, which, as far as local circumstances will permit, shall in shape be rectangular parallelograms, of which the sides shall run in the direction of the cardinal points of the compass, and of which the shortest side shall be at least two thirds of the length of the longest side, save only where such land may be required for roads, railroads, or tramways connected with the said coal mines or works for the time being of the said Company or their assigns, in which case it may be selected in the manner most suitable for constructing such roads, railroads, or tramways: Provided nevertheless, and it is hereby expressly agreed and declared, that the said Company or their assigns shall, during the continuance of the said term herein-before granted, be permitted (subject to the approval of the said Governor or Chief Officer for the time being, and such regulations as he may from time to time prescribe for the protection of public interests) to occupy rent-free any land which the said Company or their assigns may require for the construction of roads, railroads, or tramways necessary for or connected with the working or carrying on of the said coal mines and premises herein-before described and demised, or any of them, and, subject as aforesaid, shall also be permitted to occupy, at a rent to be fixed by the said Governor or Chief Officer, any land which the Company or their assigns may require for the construction of any wharves, quays, or jetties, for the loading or unloading of their vessels, or the loading or shipping of coal: Provided also, that the water frontage of any land that may be occupied by the said Company or their assigns, for any of the purposes last aforesaid, and whether taken in one or more localities, shall not exceed 500 yards in the whole: Provided also, that nothing herein-before contained shall be construed or operate to restrict or limit the right of the said Company or their assigns, at any time after the exhaustion of the right of selecting and purchasing 1,000 acres of land as aforesaid, to purchase or acquire from Her Majesty or Her successors, under the Government Land Regulations for the time being in force in the said Island, or otherwise, any pieces or parcels of land, or any messuages or hereditaments or easements, which may then be open for purchase by the public; And it is hereby further declared and agreed, that in case it shall happen that the said rent, royalties, and sums of money herein-before respectively reserved and made payable, or any of them, or any part thereof respectively, shall be in arrear and unpaid for the space of thirty days next after the respective days herein-before appointed for payment thereof respectively, it shall be lawful for Her said Majesty and Her successors, into and upon the said premises hereby respectively demised, or any part thereof respectively in the name of the whole, to enter, and the same and every part thereof respectively to have again, retain, repossess, and enjoy as in their first and former estate, and thenceforth this present Indenture of Lease, and the

Lands for roads, &c. to be had free.

Water frontage not to exceed 500 yards.

Her Majesty may resume possession if rent unpaid.

term and estate hereby created, shall cease and determine and be void, except so far only as shall relate to the recovery of any of the rents and royalties and sums of money hereby respectively reserved and made payable, which shall then be in arrear, or the satisfaction of damage for breach, non-performance, or non-observance of any of the covenants or agreements herein contained, anything herein expressed to the contrary thereof notwithstanding: And it is hereby further agreed and declared that it shall be lawful for the said Company or their assigns, at the end, expiration, or other sooner determination of the said term hereby granted, to remove, carry away, and dispose of all the engines, boilers, tanks, furnaces, whimseys, machinery, fixtures, tools, implements, ropes, rollers, skips, or other articles and things whatsoever belonging to them, and then being used and employed in the working of the said mines, and the smelting, manufacturing, and refining of the said ironstone, iron ore, petroleum and other oils and minerals, except any houses, sheds, or other buildings erected for the security of the said engines and machinery, or for the purposes of carrying on the said works; and except also any brattice-work, timber, and supports, or drain-pipes, employed in shoring up, maintaining, and keeping open any shafts, pits, adits, drifts, and drains in or connected with any such mine or mines: Provided always, and it is hereby further agreed and declared, that it shall be lawful for Her said Majesty's Secretary of State for the Colonies for the time being to determine and put an end to this present lease, and the estate and interest of the said Company in the premises hereby demised, on the 25th day of December 1889, in case such Secretary of State shall, six calendar months previous to that date, give notice in writing to the said Company, their successors or assigns, that the said collieries, coal mines, beds, and seams of coal hereby demised have not been worked to his satisfaction, such notice to be forwarded by post to or left at the last known place of business of the said Company in the United Kingdom; and from and after the expiration of such notice, this lease, and the term and estate hereby created, shall cease, determine, and be void, except so far only as shall relate to the recovery of any of the rents, royalties, and sums of money hereby respectively reserved and made payable, which shall then be in arrear, or the satisfaction of damage for breach, non-performance, or non-observance of any of the covenants or agreements herein contained; and it is hereby, lastly, agreed, that all expenses incurred, or to be incurred, by or on behalf of Her Majesty or Her successors in the preparation and execution of these presents, or in carrying out the provisions thereof, shall be borne by the said Company, and that the opinion of the Solicitor of Her Majesty's Treasury, as to the amount of such expenses, shall, in all respects, be final: In witness whereof, Thomas William Clinton Murdoch and Stephen Walcott, Esquires, Her Majesty's Colonial Land and Emigration Commissioners, have hereunto set their hands and seals on behalf of Her Majesty, and the said Oriental Coal Company (Limited)

In which case this lease to be void.

At end of lease company may remove engines &c.

Break at December 25, 1889, on six months' notice by Secretary of State for the Colonies.

In that event lease to determine.

Expenses to be paid by lessees.

have hereunto set their common seal the day and year first above written.

(Signed) T. W. C. MURDOCH. (L.S.)
„ S. WALCOTT. (L.S.)

Signed, sealed, and delivered by the above-named Thomas William Clinton Murdoch and Stephen Walcott, as such Colonial Land and Emigration Commissioners, in the presence of

(Signed) RICHARD B. COOPER,
Assistant Secretary to the said Commissioners,
8, *Park Street, Westminster.*

The Common Seal of the above-named ORIENTAL COAL COMPANY (Limited) was duly affixed hereto in the presence of

(Signed) DONALD R. MACGREGOR, } *Directors of the*
„ R. M. SMITH, } *said Company.* (L.S.)

(Signed) EDWARD R. BARBER,
Secretary to the said Company.

LONDON:
Printed by GEORGE E. EYRE and WILLIAM SPOTTISWOODE,
Printers to the Queen's most Excellent Majesty.
For Her Majesty's Stationery Office.